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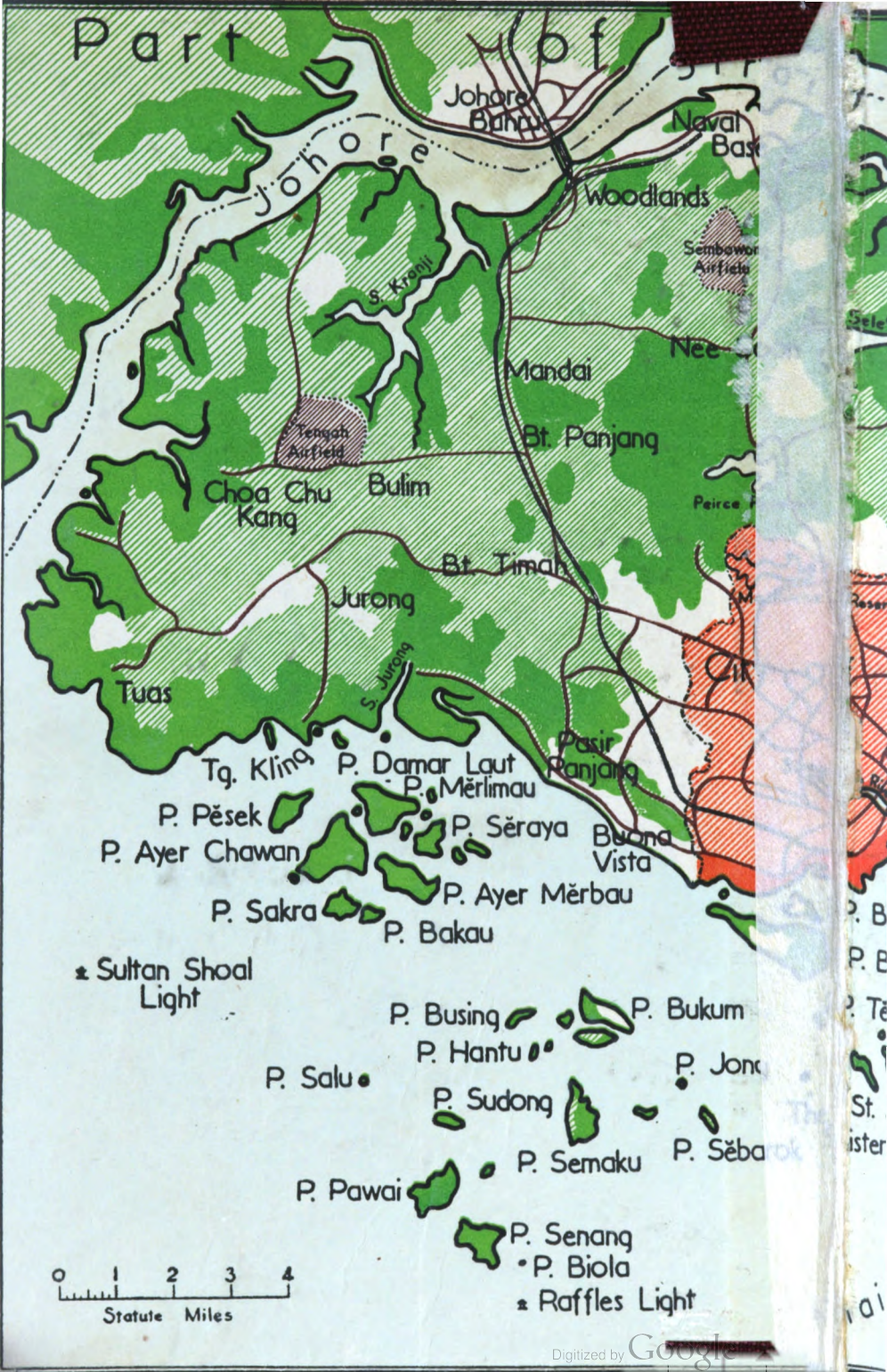
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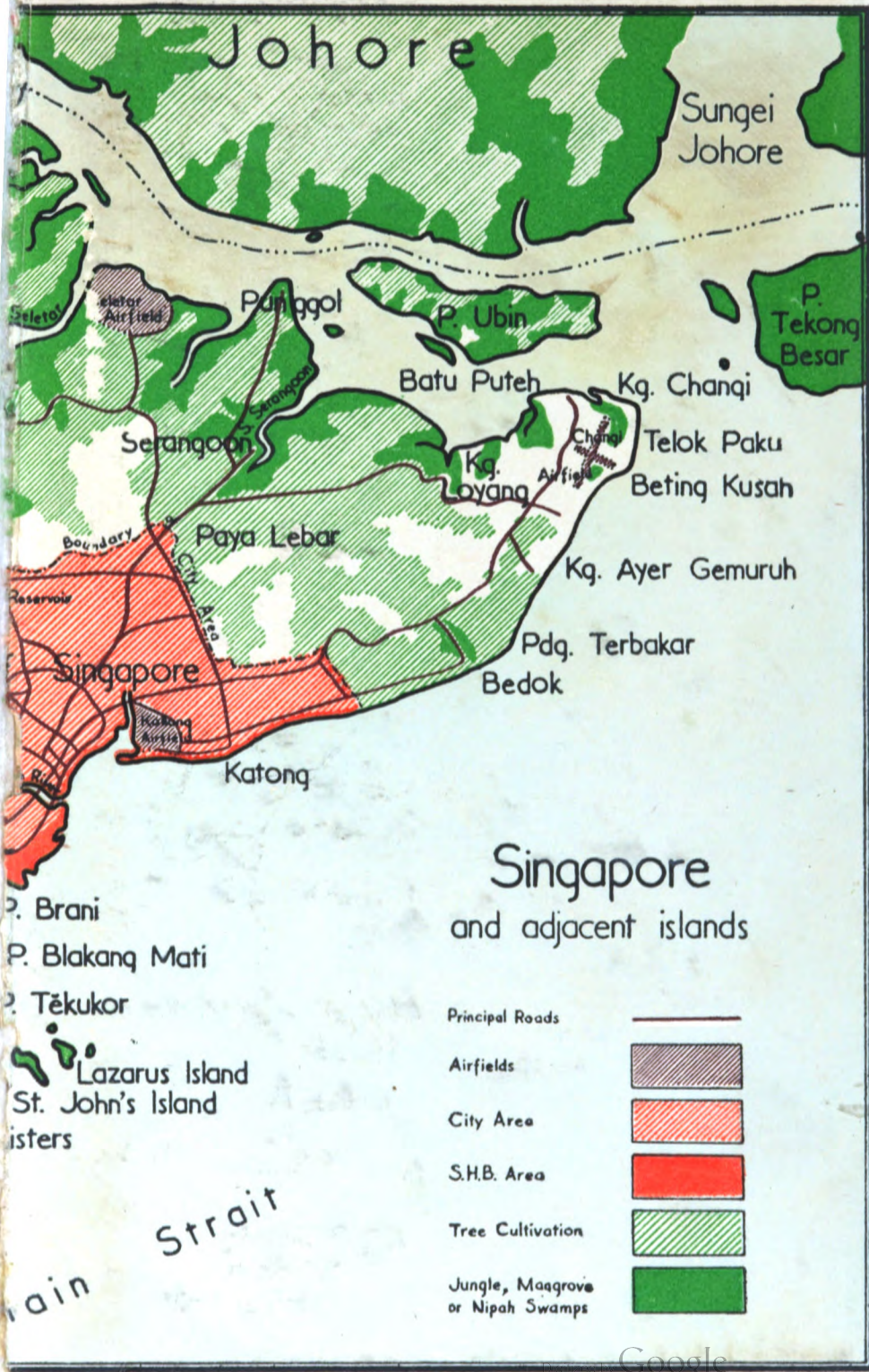


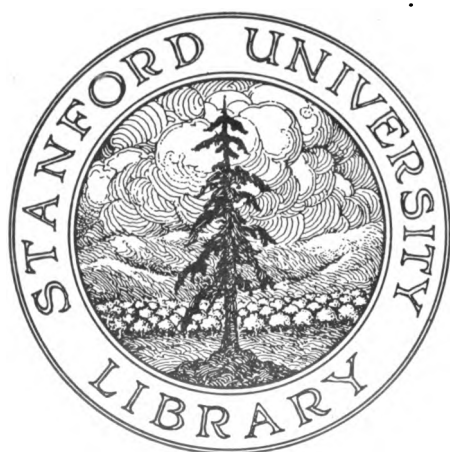


COLONY OF SINGAPORE
ANNUAL REPORT 1952

Part (of)







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Singapore Water Front from the Sea, by an unknown artist, about 1845

Colony of Singapore Annual Report 1907

W. L. BURNETT
Colonial Secretary



Published by Authority
GOVERNMENT PRINTING OFFICE



on the Sea, 1845

Colony of Singapore Annual Report 1952

BY

W. L. BLYTHE, C.M.G.

Colonial Secretary



Published by Authority

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SINGAPORE ISLAND

PART ONE



It was with profound sorrow that we learned on 6th February, 1952, of the death of His Majesty KING GEORGE THE SIXTH which was felt with a sense of personal loss by all His subjects in the Colony. General mourning was observed until the day of His Late Majesty's funeral when a Memorial Service was held in St. Andrew's Cathedral. Similar services were held in all the main religious centres in the Colony. Official mourning was observed until the 31st May.



The Proclamation of the Accession of Her Most Gracious Majesty QUEEN ELIZABETH THE SECOND was made by the Governor at a Ceremony attended by thousands on the Padang on the 9th February in the following terms:

WHEREAS it has pleased Almighty God to call to His Mercy our late Sovereign Lord KING GEORGE THE SIXTH, of Blessed and Glorious Memory by whose Decease the Crown is solely and rightfully come to the High and Mighty PRINCESS ELIZABETH ALEXANDRA MARY.

WE THEREFORE, the Governor, the Commander-in-Chief, Far East Station, the Commander-in-Chief, Far East Land Forces, the Commander-in-Chief, Far East Air Forces, the Flag Officer, Malayan Area, the General Officer Commanding, Singapore District, the Air Officer Commanding, Malaya, the Bishop of Singapore, the Chief Justice, the Deputy Commissioners-General, the Members of the Executive Council, the Vice-Chancellor of the University of Malaya, the Commonwealth Representatives, the Puisne Judges, the Members of the Legislative Council, the Members of the City Council, the Members of the Rural Board, the Members of the Chinese, Hindu, Muslim and Sikh Advisory Boards, the Justices of the Peace and the leading Members of the various Communities assembled, do now hereby with one voice and consent of Tongue and Heart publish and proclaim, that the High and Mighty PRINCESS ELIZABETH ALEXANDRA MARY is now, by the Death of our late Sovereign of Happy Memory, become QUEEN ELIZABETH THE SECOND by the Grace of God QUEEN of all Her Realm and Territories, Head of the Commonwealth, Defender of the Faith, to whom Her Lieges do acknowledge all Faith and Constant Obedience, with hearty and humble Affection; beseeching God, by whom Kings and Queens do reign, to bless the ROYAL PRINCESS ELIZABETH THE SECOND with long and happy Years to reign over us.

GIVEN at Singapore, this Ninth day of February in the Year of Our Lord One Thousand Nine Hundred and Fifty-Two.

GOD SAVE THE QUEEN.



I

General Review

THE EMERGENCY IN SINGAPORE

DURING 1952, as in the previous year, the political scene in Singapore was dominated by continued militant Communist aggression in the East generally. But whereas in Korea the war reached stalemate, and in Indo-China fortunes of the opposing forces fluctuated, closer at hand the struggle against the Communists in the Federation of Malaya showed a steady and increasingly significant improvement, whilst in Singapore itself Communist activities, already severely hampered during the latter half of 1951, remained closely contained by the unceasing vigilance of the police. Nevertheless, there have been a few serious incidents against the authorities and against those who attempt to aid them, which indicate that the enemy, although driven underground, is prepared and able to strike in the open. Consequent upon the dislocation of the Communist propaganda organization early in 1951 and the capture of printing presses later that year, the public distribution of propaganda has been negligible throughout the year, but nevertheless an underground monthly 'education paper' has been produced for limited circulation, and attempts to subvert both labour forces and school-children have continued.

It is of particular importance to the security of Singapore that the areas of Johore which lie immediately across the Straits of Johore should be cleared of Communist terrorism, and in the latter half of the year closer co-operation between the Colony and the Federation Governments was achieved, to ensure that by a tightening of controls food and other essential supplies and assistance did not reach the terrorists directly from Singapore. Closer administrative control of the areas bordering the Straits, strict regulation of land and sea traffic in goods between Singapore and Johore, and a co-ordinated system of searchlights and marine patrols have been introduced, and have entailed a considerable diversion of resources.

In this war against Communist terrorism and intimidation it is clear that the Emergency Regulations remain vital. These powers are being exercised with discretion, and have been used only when essential to public safety and order. All detention cases have been in constant review, and the number of persons in detention in Singapore at the end of the year was the lowest since the beginning of the Emergency.

LOCAL FORCES

In August this year, Her Majesty was graciously pleased to bestow the title 'Royal Malayan Navy' upon Singapore's regular Naval Force, in recognition of its progress and efficiency. Her Majesty's Malayan ships are constantly engaged in operations with the Royal Navy and the Malayan Security Forces against Communist terrorists in Malayan waters. The first phase of the building of shore-based accommodation for the Navy was completed during the year and will enable recruitment of larger numbers within the approved establishment. The Malayan Royal Naval Volunteer Reserve, Singapore Division, was expanded to include technical branches, and it is satisfactory to record that recruitment to the Reserve during the year has been more representative of the

population as a whole, and may reflect the growing attraction of the Sea Cadet Corps.

The Singapore Volunteer Corps made steady progress in training for the roles of air and coastal defence and of internal security. Re-organization of the local volunteer forces was considered during the year, and schemes now being planned will involve substantial expenditure over a period of years.

The Malayan Auxiliary Air Force, Singapore Section, made steady progress in the development of a fighter squadron and a fighter control unit. The Colony has now accepted all financial liability for the maintenance of this force other than the capital cost of aircraft.

The strength of the Sea Cadet Corps, Army Cadet Corps and Malayan Air Training Corps increased considerably during the year, and it is hoped that they will prove a good source of recruitment to the local forces.

The Singapore Harbour Board Reserve is now well established, and Civil Defence policy has been modified to concentrate resources upon the production of a reserve of trained instructors and leaders. Recruitment for the Auxiliary Fire Service and the Singapore Hospital Reserve began during the year.

CONSTITUTIONAL PROGRESS

Steady progress along the path of representative Government continued during the year. Consideration was given to the question of yet further increasing the number of elected representatives on Legislative Council, and the Governor appointed a committee of all the Unofficial Members of the Legislative Council to examine this question, and to make recommendations for such increases in elected representation as are deemed desirable at the present time. The Committee was also asked to examine the geographical limits of existing constituencies in relation to the possibility of additional constituencies being created, and finally was asked to report on the desirability of the

appointment of a Speaker of the Legislative Council. No report had been made by the end of the year.

Another committee was appointed by the Governor to examine the existing legislation and machinery governing the compilation of the Electoral Roll and system of registering votes for both the Legislative Council and the City Council, and to make recommendations for such changes as are considered necessary. This Committee, also, had not reported by the end of the year. Meantime, the annual revision of the Electoral Roll was completed and a new Roll certified on the 15th September.

In the rural areas a start was made in the development of local government by a reconstitution of the Rural Board, aiming at associating the rural population more closely with the administration of their areas by including on the Board representatives of all the rural district committees. A committee of the new Board was set up during the year to revise the boundaries of the rural district committees, following as closely as possible the natural features of the land. These revised boundaries will be valuable for fixing electoral areas when elections are introduced for local government in the rural areas.

The Public Services Commission continued its work of advising the Governor on appointments and promotions in Government Service and on matters concerned with Schemes of Service. The policy of appointing locally-domiciled officers to the higher services of the Colony continued, and the number of such officers holding substantive appointments in Division I of the Public Service increased by 34 during the year, bringing the total to 152. Appointments and promotions made during the year included the promotion of 10 Chief Inspectors or Inspectors of Police to the gazetted rank of Assistant Superintendent of Police, the appointment of 7 locally-domiciled Medical Officers, and the promotion of 16 locally-domiciled nurses as Health or Nursing Sisters. Of a total of 61 substantive appointments as

Nursing Sisters, 42 are held by locally-domiciled personnel. Facilities for the future appointment of local men to the professional and technical services were provided by the grant of training scholarships, by the introduction of opportunities for post-selection training, and by the appointment of pupils-in-training to such services as Telecommunications and Survey.

One of the most spectacular constitutional developments of 1951 was the presentation to the Municipality of a Royal Charter conferring the title of a City, and 'all such rank, liberties, privileges and immunities as are incident to a City' and declaring that 'the Municipal Commissioners of Singapore shall henceforth be one body corporate by the name and style of the City Council of Singapore'. On 14th March, 1952, in exercise of their new privileges, the City Council appointed as its first Freeman the Governor of Singapore, Sir Franklin Gimson. In his speech, the President of the City Council emphasized that the honour was conferred upon the Governor in his personal capacity in recognition of his outstanding services to the City, and stressed that the process of democratic development could never have been carried on successfully if it had not been for the enlightened and understanding guidance which the Colony had received from its Governor. The period of his administration would unquestionably go down in history as one in which new ideas in colonial administration were planted and took root. He had laid the foundation for our future growth, and had earned our respect and gratitude of which the honorary freedom of the City now conferred on him is the sign and the symbol. The Governor expressed his deep consciousness of the honour of becoming the first Freeman of the City of Singapore, and at the end of the ceremony was the object of a spontaneous demonstration of enthusiasm when a group of Councillors chaired him, and carried him shoulder high from the Hall.

Sir Franklin Gimson left the Colony by sea on 20th March, 1952, and the Colonial Secretary, Mr. W. L. Blythe, then

assumed duty as the Officer Administering the Government until the arrival of the new Governor, Mr. J. F. Nicoll, C.M.G., on 21st April, 1952.

Mr. Nicoll was installed as Governor on the 23rd April, 1952, in a ceremony in the Victoria Memorial Hall, which was attended by Members of the Executive and Legislative Councils, Commonwealth representatives, members of the Consular Corps and a representative gathering of civic leaders. Sir Han Hoe Lim, C.B.E., speaking on behalf of all races, read an address of welcome, and assured His Excellency of their loyalty to Her Majesty the Queen. In reply, the Governor pledged himself, as Her Majesty's representative, to work with all his heart to achieve the happiness and contentment of the people of the Colony. "I inherit," he said, "the fine traditions which had their beginnings in the genius of Sir Stamford Raffles, that man of vision, courage and integrity to whom Singapore owes its existence as a great trading centre. I ask now for your co-operation and help in our common task, for alone I can achieve nothing."

He then referred to the solid and significant constitutional progress achieved under his predecessor, Sir Franklin Gimson. 'Singapore has set a pattern of steady and balanced advance which is a fine example of how step by step the proper political aspirations of the people can be fulfilled without leading to the chaos which unfortunately so frequently mars political and constitutional changes. This progress must continue, for either we must go forward or go back. We cannot remain static. But the people of the Colony must understand that the political philosophy of democracy which we are applying depends for its success on all the people, and especially the electors, playing their parts with good judgment and with complete loyalty'.

He added that the Colony could rely upon its Police Force for the maintenance of law and order, and should play the fullest possible part in the fight against Communism in which the Federation of Malaya is so hotly engaged. Behind the Police Force, to assist if necessary in maintaining internal security, are

the Armed Forces of the Crown, and as Singapore progresses towards self-government it must be prepared to make an ever-increasing contribution towards its own defence. The need for defence must not, however, be allowed to interfere with the development of services such as health, housing, education and food supplies, for which the Colony's plans are imaginative and practical.

The Governor assured the commercial community that its importance to the prosperity of the Colony was fully recognized, and its advice and co-operation highly valued. He hoped that the commercial community and the Government would understand each other's problems.

The Government also realized the importance of trade unionism in the organization and welfare of manpower. The unions still had a lot to learn, and in particular needed to free themselves from situations where a minority could impose their will upon the majority for objects far removed from the well-being of the rank and file of the members. The policy of Government was simple: to create good and permanent relations between employers and employed. But it was very necessary that all should appreciate that an improved standard of living depended on increased productivity, and to achieve that both union and employer must work together.

"We live in difficult and dangerous times compared with the greater part of the nineteenth century," concluded the Governor, "but I doubt if they are more difficult and dangerous than our forebears went through. I find at times an attitude of defeatism among some people. That is dangerous, for that is the frame of mind into which our enemies wish to get us. So let us look at the future with determination and confidence.....'Let us go forward together'."

DISTINGUISHED VISITORS

Singapore has welcomed many distinguished visitors during 1952, but the year has been particularly memorable because of the visit of Their Royal Highnesses, the Duchess of Kent and her son, the Duke of Kent. They arrived in the Colony by air

on the evening of the 30th September, and were greeted by the Governor and the Commissioner-General, by civic leaders and Services representatives, whilst some 2,000 schoolchildren who lined the approaches gave their Royal Highnesses a rousing welcome as their cars left the airport.

At an impressive ceremony at the City Hall the following afternoon Her Royal Highness accepted the Freedom of the City, conferred upon her by the President of the City Council, and speaking on this occasion to her 'fellow-citizens of Singapore', she referred to the project of far-reaching significance upon which they were engaged, namely the casting into one mould of elements derived from many different cultures. She added:

"The kind words with which you have received me and have referred to the Royal Family have touched me deeply. The fortunes of her peoples overseas are, I know, a matter of profound concern to the Queen, and Her Majesty will, I feel sure, be most gratified by your expressions of affection which I will not fail to convey to her, and by your appreciation of her father's act in presenting to this City its Charter of Incorporation."

During the next three days the Duchess visited the Naval Base, Army establishments and the Royal Air Force, attended a banquet given by Members of the Executive and Legislative Councils, declared open the Royal Singapore Tuberculosis Clinic, attended a Ball at Government House, and took tea at the Island Club, and during this arduous programme met people in many walks of life. On 5th October Their Royal Highnesses left for the Federation of Malaya, returning to Singapore on 9th October. On 10th October the Duchess attended a Garden Party given by the Governor at Government House, and the following afternoon, accompanied by the Duke, attended a Youth Rally of over 20,000 children winning all their hearts by driving round the Padang before the parade standing up in an open Land Rover. On Sunday morning, 12th October, the Duchess attended Divine Service at St. Andrew's Cathedral, and the following day was present at a Garden Party given by the University of Malaya. She also laid a wreath at the British War Cemetery at Kranji.

Pictures taken during the royal visit will be found elsewhere in this Report. As the Governor said in his message to the Legislative Council in October, 'The charm, grace and beauty of the Duchess have won her a very special place in the affections of the citizens of Singapore, and her presence has given the people of the Colony a further opportunity to demonstrate their loyalty to the Crown and their devotion to the Royal Family. This visit will remain for years to come a vivid and happy memory for us all'.

Other visitors this year included His Grace the Archbishop of York, Dr. Cyril Garbett, who during a tour of the Far East paid a visit to Singapore in January when he dedicated the foundation stone of the War Memorial Hall at St. Andrew's Cathedral of which there is a photograph in this Report.

Countess Mountbatten of Burma, Chairman of the St. John and Red Cross Services Hospital Welfare Department arrived in Singapore on 29th February for a visit of six days to the Colony and the Federation of Malaya. Whilst she was in Singapore the Countess inspected St. John Ambulance Brigade Units and visited Service Hospitals.

In April, Sir Clutha MacKenzie, Consultant on Blind Welfare to the United Nations paid an unofficial visit to the Colony on his way back to the United States after a brief visit to New Zealand. Sir Clutha, who first visited Malaya in 1940, had discussions on blind welfare with officials of the Government during his stay in Singapore.

M. Jean Letourneau, French High Commissioner and Resident Minister for the Associated States of Vietnam, Laos, and Cambodia arrived in Singapore for a short visit in July and took part in the French Week celebrations organized by the Colony's French community. He was accompanied by Nguyen Thanh Giung, Vietnamese Minister of Education, M. Offroy, Diplomatic Counsellor, and M. Dannard, Adviser to the Minister of State.

Sir George Pepler, the Town Planning Adviser to the Government paid his two routine visits to the Colony in July and

December during which he reviewed the progress of the work of the Diagnostic Survey and Master Planning Team and advised on specific matters concerning future development.

Mr. Justice William O. Douglas, the noted jurist and writer paid a visit to Singapore in August during the course of a tour of South-East Asian countries.

During August twelve officers of the Pakistan Civil Service broke their return journey from Australia to Pakistan to spend three days in the Colony, during which they were conducted round the Singapore Harbour Board, Fisheries Control Point, Singapore Improvement Trust, Social Welfare Department, University of Malaya, Raffles Museum, Botanical Gardens, Police Training School and other interesting places. The night before they left, they were entertained to dinner by a similar number of officers of the Singapore Government. We were very pleased to show these officers of the Pakistan Government the way in which we are tackling our problems here.

The Mayor of Rangoon, U Htun Tin, visited Singapore in December during a tour of South-East Asian municipalities. He was accompanied by his secretary, Dr. Ba Glay, and U Hla, chairman of the Rangoon Municipal Health Committee, Dr. Ba Aye, member of the Road and Buildings Committee, and U Maung Maung, Municipal Councillor. They spent two days in Singapore during which they met the President of the City Council and City Councillors.

A conference of the United Nations Forestry Commission for Asia and the Far East which was opened by the Governor on 1st December at the Victoria Memorial Hall was attended by seventy delegates from twenty-five countries and United Nations agencies. This Conference provided a valuable opportunity for specialists to examine and discuss technical problems of mutual interest. It lasted for a fortnight. During the Conference, delegates were able to visit timber sawmills and factories and the Forest Research Station at Kepong in the Federation of Malaya.

COMMERCE, PUBLIC FINANCE AND INDUSTRIAL RELATIONS

Singapore is not only the premier port of Malaya but is also the natural entrepot for surrounding territories in South-East Asia. It has been a free port since the time of its foundation in 1819, and its prosperity depends to a large extent on its entrepot trade which has been nourished by this freedom. Singapore is therefore peculiarly sensitive to any restrictive trade controls, whether introduced locally or in neighbouring territories, or in customer countries further afield. Furthermore, Singapore's prosperity is largely dependent upon trade in two particular products, rubber and tin, and any pronounced fluctuation in demand for those products, with consequent effects upon their price, has very special repercussions upon the value of its trade, and upon its economy generally. The demand for rubber and tin is, of course, strongly affected by the world political situation which Singapore itself is unable to influence to any appreciable extent.

The year 1951 was of exceptional economic prosperity in Singapore, but the same cannot be said of 1952 although it is true that the *volume* of trade compares favourably with 1950 and the daily average of cargo handled in the port during the year (some 21,500 freight tons) was only slightly less than in 1951. But the *value* of imports dropped from the record \$3,594 million in 1951 to \$2,849 million this year, though comparing favourably with \$2,124 million in 1950, whilst the value of exports was \$2,543 million compared with \$4,016 million in 1951 and \$2,480 million in 1950. Of the \$745 million decrease in the value of imports, some \$609 million was due to decreased imports of rubber, and of the \$1,473 million reduction in the value of exports, \$1,403 million was due to decreased rubber exports.

The boom in Singapore's trade in 1951 was a reflection of the increased world-wide demand for defence materials of which rubber is one of the most important. The price of this commodity, though fluctuating, remained high and Singapore's big exports to

the United States correspondingly increased her dollar-earning capacity. But this year the demand, particularly from America, fell, and the reduced price of rubber affected both the value of Singapore's trade and her dollar-earning ability. The year saw also a marked decrease in the amount of rubber imported from neighbouring territories, particularly from Indonesia, and this has resulted in considerable anxiety in the rubber milling industry in Singapore. These two factors, namely, the decrease in rubber exports and imports, are illustrated in the figures given below:—

EXPORTS

	1952	1951	1950
	\$ million	\$ million	\$ million
Total value of Exports of Merchandise from Singapore ..	2,543	4,016	2,480
Total decrease from 1951 Export figures ..	1,473	..	..
Total decrease from 1951 in rubber Exports only ..	1,403	..	..
	tons	tons	tons
Ocean shipments of rubber Exports from Singapore ..	555,351	750,229	655,023
Total decrease in 1952 for Export rubber ..	194,878	..	..
	tons	tons	tons
Destination and tonnage of rubber Exports from Malaya to:—			
China .. ..	..	22,727	..
Russia	11,125	17,497	..
United Kingdom ..	273,855	280,855	..
United States of America	234,248	359,684	..
	tons	tons	tons
Decrease in rubber Exports, 1952 from Malaya to:—			
China	22,727 (a)	..	..
Russia	6,372	..	..
United Kingdom ..	7,000	..	..
United States of America	125,436	..	..

(a) Trade in rubber with China banned since May 1951.

IMPORTS

	1952	1951	1950
	\$ million	\$ million	\$ million
Total value of Imports of Merchandise	2,849	3,594	2,124
Total decrease in 1952	745	..	..
Total decrease in rubber only in 1952	609	..	..
	tons	tons	tons
Total tonnage of rubber Imports	317,792	462,986	372,775
Decrease in rubber tonnage in 1952	145,194	..	..
	tons	tons	tons
Total tonnage of rubber Imports from Indonesia only	277,605	406,218	303,817
Decrease in rubber Imports from Indonesia, 1952	128,613	..	..

The price of rubber itself has fluctuated during the year from \$1.40 per lb. for No. 1 R.S.S. f.o.b. in January this year, to 73½ cents per lb. in October, rising to 92½ cents per lb. at the end of the year. The average price for this year was 96½ cents, as compared with \$1.69 in 1951. Tin prices also fluctuated during the year, and were lower than in 1951. The monthly average price varied from £984 2s. 8d. per ton in February this year, to £946 19s. 4½d. in August. The average for the year was £969 18s. 6d. per ton and the price at the end of the year was £908 15s. 7d. Copra prices also varied during the year from \$23 to \$36 a pikul.

The desirability of reducing Singapore's reliance upon rubber and tin is apparent, and in his Budget Address to Legislative Council the Governor stressed the importance of expanding local industries, and of attracting foreign investments in the Colony. "Singapore," he said, "offers many advantages to the overseas investor. Machinery and materials enter free of duty, remittance of profits on capital invested from overseas is permitted, and in the case of capital supplied for approved projects from places outside the sterling area repatriation of funds so

subscribed is permitted at any time through prescribed channels to the country from which they came. There is no restriction on foreign ownership of the capital invested in any enterprise. Taxation is relatively low, and there is no discrimination against overseas capital. Moreover, these attractions exist in a free port which is situated at the natural junction of all the major sea and air routes in South-East Asia."

Considerable attention was given during the year to improving the local production of food, particularly vegetables, livestock and fish. The Colony can now meet its own demands for fresh poultry, and was able to export 1,500 pigs per month to the Federation. The surplus production of eggs and chickens is also exported to the Federation. Fish production increased by 1,400 tons, owing to the development of off-shore fisheries.

The public finances of the Colony remained sound throughout the year. The general revenue was estimated at \$175 million, and the Budget based on this estimate showed a surplus of \$5.77 million, which is likely in the event to prove to be a surplus of \$38.3 million. Revenue from income tax estimated at \$55 million was \$72.77 million, or 36½ per cent of the total revenue. There was, in addition, an increase in all the main heads of revenue. It is fortunate that the public finances of the Colony are so healthy, not only because of immediate needs but also because of the future expansion of the Social Services, together with the development of Singapore under the Master Plan. The vast sums which will be needed for these schemes will, no doubt, have to be met at least in part from reserves.

Although the year opened with ten disputes in industry and closed with eight, and a strike at the Naval Base, industrial relations were generally good, and the prevailing atmosphere between employers and their work-people was one of reasonable calm. There was no serious unemployment among manual workers, although unskilled labour was slightly more plentiful than in 1951. Even retrenchment in the rubber milling industry was offset by generous 'compensation' terms granted to discharged workmen by their employers, whilst the opening of

some new factories and an increase in the building trade offered new sources of employment.

The cost of living remained stable, but wages tended to rise in a number of trades, and many agreements giving increases in wages and allowances were negotiated between employers and employees, or between employers and unions. Parties to the negotiations were often assisted by a conciliation officer of the Labour Department. Of sixty-eight major disputes dealt with by the Labour Department, forty concerned wage rates. Holidays with pay figured more prominently in demands than previously.

Nevertheless, despite negotiations, there were a number of strikes, and some 40,000 man-hours were lost during the year, a considerable increase over figures for recent years. Of these strikes, the most important was that by the uniformed personnel of the Posts and Telegraphs Department in May. Emergency arrangements made by the Postal authorities prevented any serious breakdown in postal services, but inevitably some inconvenience was caused to the public.

Unions of Government Employees were active in making claims throughout the year, and the Government was involved in negotiations with no less than eight unions. In June, a Government Council for Negotiation, based on a slight modification of the Whitley Council machinery, was set up by agreement between the Singapore Government and trade unions of Government employees to undertake consultation and negotiation on matters affecting Government servants in Divisions III and IV of the Public Service. This Council held its first meeting in July.

The number of unions of employees increased from 107 to 122 and union membership increased from 58,322 to 63,831.

COMMUNICATIONS AND ELECTRICITY

Work on the new Airport at Paya Lebar has proceeded rapidly. The main runway which will be 8,000 feet in length has been designed to meet all foreseeable requirements and should the need ever arise will be capable of further extension.

The Governor appointed a committee during the year to advise on the planning of the Airport to ensure that advantage is taken of the most up-to-date experience.

A deficiency which has plagued Singapore ever since the War and was the source of annoyance to its citizens and of disturbance of its industry was removed in December by the bringing into operation of the first 25,000 Kw. electrical generator at the new Power Station which is planned for expansion to an output of 150,000 Kw. When the second of these units comes into operation early in 1953, there will be ample electric power for all Singapore's needs.

POPULATION

The population of Singapore continues to increase steadily year by year. In 1952 the birth rate was 47.5 per thousand as compared with 46.17 per thousand in 1951, and the death rate was 11.20 per thousand as compared with 11.88 per thousand in 1951. The net rate of increase was 36.25 per thousand in 1952 as compared with 34.29 in 1951. As the estimated population in the middle of 1952 was 1,077,155 the annual increase in the population has now reached some 39,000. It is important to note that this increase is a natural increase, and no longer due to large scale immigration from China and India, as it was during the period 1911-31, whilst another significant factor in present and future population trends is the change in the ratio of males and females. In 1931, there were 171 males per 100 females, whereas the ratio now is 115 : 100.

SOCIAL SERVICES

General

It is clearly essential that in planning our Social Services we should bear in mind not only our existing problems but those added problems which our steadily rising annual increase in population will impose, and realize that our approved plans for expansion will in the next few years inevitably call for a very great increase in annually recurrent expenditure. As will be seen below, considerable increase has already occurred. There

are, in addition, increasing capital commitments. The re-establishment of squatters displaced by development of land has necessitated expenditure of considerable sums for compensation and for the provision of new sites for resettlement. The financing of the Singapore Improvement Trust's building programmes falls in the first place upon public funds. Reserves of Crown land have been virtually exhausted and it has been necessary to purchase large areas of land to provide sites for housing estates and for the many and varied buildings needed for the Education, Medical and Social Welfare Services. Further large areas of land have been acquired for food production. For these reasons, despite the healthy nature of the Colony's finances, the position can already be foreseen when the capital expenditure on Social Services will have become so great that it must either be met by increased taxation or, in part at least, from reserves.

Education

The striking increase which has already taken place in the annually recurrent expenditure on education during the past few years is illustrated in the figures given below:—

			\$
1950	..	..	6,298,919
1951	..	..	12,433,271
1952	..	..	15,870,485

The capital cost of new schools and other buildings for the Education Department, excluding living quarters, was as follows:—

			\$
1950	..	..	2,350,000
1951	..	..	2,326,000
1952	..	..	2,377,000

Development has continued both under the Neilson Ten-Year Plan, the original embodiment of Government's policy to provide free, universal and compulsory education for the children of Singapore, and under the concurrent Frisby Five-Year Supplementary Plan, which aims at building 18 new primary schools

annually, each providing places for 1,000 children in two sessions daily. Eleven new schools were completed under the Supplementary Plan, and two under the Ten-Year Plan, and by the end of 1952 the total number of Government schools included 71 English schools in 46 buildings, 48 Malay schools in 31 buildings, a Junior Technical school, a Handicraft school, and a Nautical school. By the end of the year, 147,274 children, of whom 96,583 were boys and 50,691 were girls, were attending 497 Primary and Secondary schools. Of the children in schools maintained or aided by Government, 48 per cent were in English schools and 42 per cent in Chinese schools. If the figures for private non-aided schools are added, the totals show that 50 per cent were in Chinese schools and 43 per cent in English schools.

During the year some progress has been made in the provision of facilities for the teaching of science, and the post-Certificate Classes which were introduced in 1951 seem certain to have become a permanent part of the education system. At the Teachers' Training College 1,515 students were enrolled as compared with 1,528 in 1951, and 280 newly-trained teachers started in the schools during the year. There has been some slight increase in the enrolment at the Junior Technical School, and at the evening technical classes, whilst a second technical school, run by a Mission authority in a rural area, and which is now a fully aided English school, has greatly increased its workshop space. Further progress has been made in adult education, and by the end of 1952 there were 6,806 students attending 251 language classes in English, Mandarin, Tamil and Malay. The Council for Adult Education will soon have a building to serve as its headquarters.

The University of Malaya, formed by the amalgamation of Raffles College and the King Edward VII College of Medicine in 1949, continues to develop. Of the 859 students registered during the 1951-52 session, 333 were studying Medicine, 265

Arts, 129 Science, 95 Dentistry, and 37 Pharmacy. The students included 564 Chinese, 92 Indians, 92 Ceylonese, 74 Malays, 30 Eurasians and 7 others, and at Convocation 133 graduates were awarded Degrees, and 10 were awarded Diplomas. The Annual Report of the University of Malaya 1951-52 shows that at the beginning of the 1952-53 session, 890 students were expected to be registered. The new admission was smaller than in previous years owing to the post-School Certificate course introduced in 1952 which has postponed the entrance of a large number of students for one year, but a regular flow will be resumed in 1953.

During the year, a site of some 1,477 acres was acquired at Johore Bahru and earmarked for the new university buildings, whilst a firm of London architects was appointed to advise on layout and design. Meantime, in Singapore itself there was considerable increase in the provision of hostel, staff and teaching accommodation, and progress was made in the building of a new library block. In April, the Vice-Chancellor, Sir George Allen, retired and was succeeded by Sir Sidney Caine. Thirty-six staff appointments were made during the year, including a holder of the new Chair of Orthopædic Surgery and a Lecturer in Philosophy, but the Chair in the proposed Department of Engineering was not filled, nor was it possible to fill the Chairs of Malay Studies or Chinese Language and Literature.

Medical Services

Further progress was made during the year in the implementation of the Ten-Year Medical Plan, and there was a steady expansion of Medical Services. Annually recurrent expenditure rose in 1952 to \$15,403,694 (provisional) from \$12,047,616 in 1951 and \$7,000,780 in 1950. The cost of buildings for the Medical Department, excluding non-institutional living quarters, was \$1,452,000 in 1952, compared with \$510,000 in 1951, and \$216,000 in 1950.

During the year the new Government Medical Store and Pharmaceutical Laboratory completed its move to the new premises built during 1951, and the new Nurses' Home and Out-patient Division at the General Hospital were almost completed. Two new Rural Maternity and Child Welfare Centres were opened, and a residential midwife centre was started on Pulau Ubin. Among projects sponsored by voluntary bodies, the Royal Singapore Tuberculosis Clinic erected by the Singapore Anti-Tuberculosis Association was opened in October, work on a community centre and school for the Leper Settlement was begun by the Singapore Rotary Club, and the foundation stone was laid of a Crippled Children's Home to be built by the Singapore Branch of the British Red Cross Society, the building being completed but not opened by the end of the year.

During the year there were 607,561 attendances at the Hospital Out-patient Departments compared with 501,529 in 1951 and 87,447 in 1938. No less than 45,613 in-patients were admitted to hospitals, compared with 38,497 in 1951 and 25,913 in 1938. Although more beds are now in use than ever before it is necessary to expand still further, and the Medical Plan aims at doubling the present accommodation. At the rural clinics there were 188,024 attendances, and 100,364 visits were made to homes during the year. Three travelling dispensaries and one floating dispensary visited remote rural areas and the outlying islands, and dealt with 55,349 cases, of which 36,498 were new cases.

Singapore remains one of the healthiest cities in the East. The general death rate continued its downward trend to 11.20 per 1,000 (12,060 deaths) and may be considered very low for a tropical territory such as Singapore which is in close contact with areas far less healthy. It has already been noted that the birth rate reached the very high post-war level of 47.5 per 1,000 (51,196 births). The maternal mortality was 1.8 per 1,000 live births. That this figure was not much higher is satisfactory when it is realized that there were 17,000 deliveries in

the 200-bed Maternity Hospital, and when due weight is given to the inevitable effect of the overcrowded conditions in which so large a percentage of the population lives. The Rural Health staff attended 8,917 of the 14,641 confinements in the rural areas, and it is now estimated that 80 per cent of expectant mothers in the Colony receive attention either from the City or Government Medical Services. The present infant mortality rate is 69.97 per 1,000 live births, and is the lowest in the Colony's history.

There were no outbreaks of any major infectious disease during the year. The death rate from most diseases is declining, though deaths from heart diseases, diseases of the nervous system and cancer show a tendency to rise. Although tuberculosis continued to be the disease of major importance and concern, the number of deaths from this disease continued to fall. There were record attendances at the out-patient clinics for tuberculosis patients at the Tan Tock Seng Hospital and the Singapore Anti-Tuberculosis Association's treatment centre. Almoners and health visitors followed up cases, and a scheme for treatment allowances was in operation. During the year, various voluntary bodies became interested in proposals for the provision of homes for chronic tuberculosis cases, and it is hoped that definite plans will shortly be evolved.

Town Planning and Housing

Very good progress has been made by the Diagnostic Survey and Master Plan Team and a preliminary plan for Singapore is nearly complete. The Colony's building potential has been estimated and development proposals prepared. Early in the year a committee was set up to consider land requirements of the Services, Improvement Trust, the City Council and the various departments of the Government and to fit them into the Master Plan. A revised plan has been prepared for the area

of Crown land between Shenton Way and the Telok Ayer Basin, whilst the planning of the area of land included in the present Kallang Aerodrome, Kallang Basin and Tanjong Rhu was begun.

A great effort has been made to tackle the shortage of houses which is one of the Colony's most intractable problems. Despite the greatly increased cost of building, the Singapore Improvement Trust has been able to increase its rate of building by concentrating upon low cost types of houses which employ many new construction methods, including the partial use of preconstructed sections. A total of 1,823 dwelling units and 63 shops was completed by the Trust during the year, providing accommodation for about 10,000 persons. A further 1,742 flats and 26 shops were under construction at the end of the year. Another programme which is designed to be completed by the middle of 1954 will provide in all 639 three-bedroom flats, 1,928 two-bedroom flats, 156 one-bedroom flats and 22 shops. The work of the Trust as a public housing body is quite outstanding by any standards, and has received the highest praise from housing authorities of international repute. Private building of all types has also been considerable. Finally, the Government has drawn up a scheme for the* resettlement in selected areas within the City limits of squatters displaced from Crown land. This scheme provides access roads, water supply and other amenities together with hardstandings upon which squatters will be permitted to erect their own attap dwellings. They will be given an assurance that they will not be required to move from these areas for ten years.

But despite all this, the rapid growth of population and capacity of the building industry, quite apart from the financial implications, combine to make the provision of adequate housing, whether public or private, a problem of the utmost difficulty. An attempt has been made to increase the potential of the building industry by the introduction of courses of instruction in building.

Social Welfare

The Department of Social Welfare has been consolidated during the year. In particular, the work of the Public Assistance Section and the sums which it is responsible for disbursing have grown remarkably.

Two new Children's Centres designed for development ultimately into full Community Centres were constructed this year, and can be regarded as the prototypes of a series of such centres. There have also been considerable developments in the provision of special facilities for handicapped children through the opening of a small home for mentally deficient children by the Department of Social Welfare and of a home for handicapped girls by the Canossian Institute. Work on the Red Cross Home for crippled children was practically completed at the end of the year. Plans for improving welfare work among the blind were drawn up by Sir Clutha MacKenzie who visited the Colony this year. A residential school for blind children is now being planned. The Children's Society, whose main object is the prevention of cruelty to children was inaugurated in February.

The value of the assistance given to the Government by various voluntary bodies in the fields of Social Welfare, Education and Medicine cannot be over-emphasized. Not only do these organizations provide much needed practical help, but their activities are also a heartening indication of the growth of a public consciousness of the needs of fellow citizens and of the opportunity for service which these organizations provide.

ART, MUSIC AND DRAMA

Singapore is becoming increasingly interested in art, music and drama, and throughout the year there was an uninterrupted flow of exhibitions, concerts and plays of a wide variety which ensured that there was something to appeal to all tastes. There were 14 exhibitions, of which 8 were staged by the Singapore Art Society, and of which the most notable was the exhibition

of Chinese Classical Art sponsored jointly by the Singapore Art Society and the China Society. The open exhibition of works by local artists drew a record entry of 412 exhibits by 104 artists. Standards of work exhibited and of the method of presentation showed further improvement over previous years. There is increasing interest in photography.

Interest in live drama is also increasing, and a total of thirteen plays were staged by amateur producers and actors at which a generally high standard was achieved, and which presented entertainment of considerable variety, including Ibsen's *Ghosts*, Fry's *Ring Round the Moon* and Eliott's *The Cocktail Party*.

Visits from a number of international concert artists were made during the year, and our own musical and choral societies presented several ambitious concerts which revealed the growing enthusiasm and quality of our amateur musicians.

SPORT

Amateur sport plays a great part in bringing together the many communities in the Colony, and this year's results show that the high standards already reached are being steadily improved, partly as a result of increasing attention to expert coaching. The Colony's sportsmen have had a very successful year in which the Rugby XV won the 'All-India' trophy, the Association Football team retained the Malaya Cup for the third successive year, the Amateur Athletic Association won the Malayan Inter-State trophy for the fourth successive year, the Royal Singapore Yacht Club won all the events at the Inter-Port Regatta at Hong Kong, and Singapore's badminton players helped to retain the Thomas Cup, won by Malaya in 1948.

The second half of this Report describes in much greater detail many matters of which but brief mention has been made here. Singapore continues to progress. In all matters affecting the life of the community, standards are being improved. Singapore, in increasing measure, remains in the forefront among the

countries of South-East Asia both in planning and performance, and our polyglot community lives in mutual tolerance and safety. Despite a recession in trade during the year there has been no significant unemployment and the general standard of living continues to be higher than that of any city in the East. If this progress is to be maintained there must be not only pride in achievement but the determination to work conscientiously and devotedly in facing the increasingly intricate problems which are bound to arise in times less prosperous than the present. But the responsible advice and judgment of members of our Councils, the growing political consciousness of the electorate, the loyalty of the public service and the increasing awareness among persons of all races of the needs of the less fortunate of all communities, are factors upon which reliance can be placed for the furtherance of the prosperity and happiness of the people of this Island. We face the future with hope and with confidence.

PART TWO



II

Population

COLONY OF SINGAPORE

THE ESTIMATED TOTAL population at mid-year was 1,077,155. This estimate is based on the actual figure at the 1947 census, to which has been added the excess of births over deaths and the migrational surplus of the succeeding years. The migrational surplus for Singapore is calculated as the same fraction of the total migrational surplus for Singapore and the Federation of Malaya as the population of Singapore bears to the total population of the Federation of Malaya and Singapore. It is realized that this method of calculation is far from accurate, but there is no migration control between the two territories. Migration between Singapore and the Federation of Malaya is thus an unknown quantity, but it is believed to have been substantial both during and after the Japanese occupation, with the general direction of net migration from the Federation of Malaya to Singapore. The estimate of 1,077,155 is therefore more likely to be an under-estimate than an over-estimate.

The table on page 30 indicates the remarkable increase in the population of Singapore, the main reasons for which have changed over the period recorded. The increase of some 83 per cent between 1911 and 1931 was due mainly to large scale migration

from China and India. Although it is not possible to select any exact turning point, a steady natural increase had taken the place of migration as the main factor before the last war. The most significant factor in present and future population trends is the change in the ratio of males and females. In 1931, there were 171 males per 100 females; the ratio now is only 115:100.

Details by race since 1911 are as follows:—

Year	Chinese	Malay- sians	Indians and Pakis- tanis	Euro- peans	Eura- sians	Others	Total
1911 (Census) ..	219,577	41,806	27,755	not available	..	..	289,138
1921 (Census) ..	315,151	53,595	32,314	6,145	5,436	5,717	418,358
1931 (Census) ..	418,640	65,014	50,811	8,082	6,903	8,295	557,745
1947 (Census) ..	729,473	113,803	68,967	9,279	9,110	7,512	938,144
1948 (Mid-year)	749,591	116,364	69,474	9,660	9,354	7,599	962,042
1949 (Mid-year)	761,962	119,623	70,749	10,923	9,716	7,845	980,818
1950 (Mid-year)	789,160	123,624	72,467	11,504	10,093	8,605	1,017,453
1951 (Mid-year)	806,690	127,063	75,601	12,785	10,451	9,343	1,041,933
1952 (Mid-year)	830,079	131,664	80,096	14,565	10,820	9,931	1,077,155

BIRTHS AND BIRTH RATES

	1931		1947		1952	
	Births Regis- tered	Crude Birth Rate	Births Regis- tered	Crude Birth Rate	Births Regis- tered	Crude Birth Rate
Chinese	15,993	37.85	33,629	46.20	39,088	47.09
Malaysians ..	2,862	43.69	5,473	47.73	6,858	52.09
Indians and Pakistanis ..	1,020	19.64	3,087	43.30	3,672	45.84
Europeans ..	169	20.55	312	35.79	757	51.97
Eurasians ..	199	28.53	359	39.84	359	33.18
Others	227	29.09	185	28.27	460	46.32
Unknown .. ..	..	..	..	..	2	..
Total	20,470	36.37	43,045	45.89	51,196	47.53
Males	10,753	..	22,152	..	26,342	..
Females	9,717	..	20,893	..	24,854	..
Total	20,470	..	43,045	..	51,196	..

Male births per 100 births 111

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Morning Prayer, oil painting by Kwan Sai Kheong, Art Master Raffles Institution



C. A. Gibson-Hill

Old shophouses built circa 1870 along North Boat Quay

BIRTHS REGISTERED BY SEX AND RACE, 1952

	Urban Area	Rural Area	Singapore Total
MALES			
Europeans	126	264	390
Eurasians	161	24	185
Chinese	14,795	5,286	20,081
Malaysians	1,983	1,565	3,548
Indians and Pakistanis	1,537	381	1,918
Others	155	64	219
Unknown	1	..	1
Total ..	18,758	7,584	26,342
FEMALES			
Europeans	131	236	367
Eurasians	159	15	174
Chinese	14,075	4,932	19,007
Malaysians	1,866	1,444	3,310
Indians and Pakistanis	1,398	356	1,754
Others	167	74	241
Unknown	1	..	1
Total ..	17,797	7,057	24,854
Grand Total ..	36,555	14,641	51,196

BIRTHS BY SEX, RACE AND MOTHERS' AGES, 1952

Mothers' Ages	EUROPEANS		EURASIANS		CHINESE		MALAYSIANS		INDIANS AND PAKISTANIS		OTHERS		UN- KNOWN		TOTAL	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
12 Years ..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	1	1
13 Years ..	..	..	..	..	1	1	2	..	3	1	..	..	..	..	6	2
14 Years ..	..	..	..	1	1	..	7	11	5	10	..	..	..	..	13	22
15 Years ..	..	..	..	..	7	10	50	34	21	14	..	..	..	..	78	58
16 Years ..	..	..	..	..	60	49	126	111	58	51	4	..	..	..	248	211
17 Years ..	..	..	3	1	157	157	184	202	78	67	5	8	..	..	427	435
18 Years ..	2	1	7	7	391	348	287	240	89	82	6	9	..	..	782	687
19 Years ..	5	5	11	6	610	557	209	178	113	94	9	14	..	..	937	854
20 Years ..	8	11	11	8	940	835	293	287	146	132	13	12	..	..	1,411	1,285
21 Years ..	16	20	10	6	1,097	1,005	197	193	110	89	15	13	..	..	1,445	1,326
22 Years ..	34	26	10	10	1,179	1,241	253	250	136	147	17	22	..	..	1,629	1,696
23 Years ..	26	22	13	9	1,197	1,214	206	204	118	137	17	20	..	..	1,822	1,693
24 Years ..	27	21	12	8	1,443	1,356	195	182	132	116	13	10	..	..	1,615	1,536
25 Years ..	36	24	10	13	1,178	1,119	241	244	129	114	21	22	..	..	1,383	1,316
26 Years ..	34	33	11	17	1,067	994	159	147	101	111	11	14	..	..	1,197	1,176
27 Years ..	28	18	9	10	935	921	119	137	94	70	12	20	..	..	1,399	1,286
28 Years ..	23	33	13	17	1,052	956	204	158	89	102	18	20	..	..	1,116	1,028
29 Years ..	28	20	7	5	855	831	142	104	71	61	13	7	..	..	1,229	1,075
30 Years ..	16	16	14	11	929	813	159	143	101	85	10	7	..	..	18,335	17,293
Carried forward ..	283	250	141	129	13,099	12,408	3,034	2,825	1,594	1,483	184	198	..	..

BIRTHS BY SEX, RACE AND MOTHERS' AGES, 1952—continued

Mothers' Ages	EUROPEANS		EURASIANS		CHINESE		MALAYSIANS		INDIANS AND PAKISTANIS		OTHERS		UN- KNOWN		TOTAL	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
<i>Brought forward</i>	283	250	141	129	13,099	12,408	3,034	2,825	1,594	1,483	184	198	..	..	18,335	17,293
31 Years ..	12	29	2	10	723	698	57	65	50	45	10	4	..	..	854	851
32 Years ..	18	18	7	2	834	815	86	79	64	49	2	9	..	..	1,011	972
33 Years ..	12	15	10	4	643	610	55	63	32	43	3	8	..	..	755	743
34 Years ..	17	12	2	5	720	731	59	38	26	26	..	5	..	..	824	817
35 Years ..	10	3	4	5	652	546	70	67	47	30	6	2	..	..	789	653
36 Years ..	8	14	8	7	658	611	28	26	22	19	3	2	..	..	727	679
37 Years ..	15	8	2	1	563	552	36	27	15	22	4	3	..	..	635	613
38 Years ..	5	7	4	3	557	480	40	42	27	16	2	2	..	..	635	550
39 Years ..	1	4	2	5	421	370	24	17	18	9	1	2	..	..	467	407
40 Years ..	1	1	..	..	383	366	28	27	3	6	2	4	..	..	417	404
41 Years ..	4	4	..	1	267	271	7	5	7	4	2	..	..	..	287	285
42 Years ..	2	1	2	..	242	209	5	11	7	2	..	..	..	..	258	223
43 Years ..	..	..	1	2	125	158	6	7	3	..	..	..	..	..	136	167
44 Years ..	..	..	..	..	94	87	4	3	2	..	..	2	..	..	100	92
45 Years ..	..	1	..	..	45	41	6	4	1	..	..	..	..	..	52	46
Over 45 Years	..	..	..	..	55	54	3	4	..	..	..	..	..	..	59	58
Unknown..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1
Total ..	390	367	185	174	20,081	19,007	3,548	3,310	1,918	1,754	219	241	1	1	26,342	24,854

With the rapidly increasing population and the continuing high fertility rate, it is not surprising that this year's figure of 51,196 births registered was an all-time record. Fertility rates, although very high in Singapore, are nevertheless somewhat lower than in the rural areas of the Malayan mainland. This urban-rural differential in fertility rates has been noticed by research workers in other areas of the East and is, of course, common in countries of the West.

The crude birth rate does not give a satisfactory index of the reproductive capacities of the various races nor is it possible on the basis of existing statistics to construct an accurate picture of the current age structure of the population and hence age specific fertility rates. It is believed, however, that the fertility of the Chinese and Indians is higher than that of the Malays.

The annual increase in the number of births over the post-war period is seen to be continuing at a phenomenal rate. This year's figure of 51,196 is an all-time record.

DEATHS AND DEATH RATES

	1931		1947		1952	
	Deaths Registered	Crude Death Rate	Deaths Registered	Crude Death Rate	Deaths Registered	Crude Death Rate
Chinese	10,599	25.09	9,368	12.87	9,050	10.90
Malaysians ..	1,905	29.08	2,029	17.70	1,922	14.60
Indians and Pakistanis ..	820	15.81	878	12.32	798	9.96
Europeans ..	51	6.20	74	8.49	103	7.07
Eurasians ..	103	14.76	84	9.32	85	7.86
Others ..	145	18.58	78	11.92	93	9.36
Unknown ..	..	..	..	..	8	..
Unknown sex and race	..	..	..	..	1	..
Total ..	13,623	24.20	12,511	13.34	12,060	11.20

DEATHS BY SEX AND RACE, 1952

	Urban Area	Rural Area	Singapore Total
MALES			
Europeans	52	27	79
Eurasians	35	7	42
Chinese	4,211	1,003	5,214
Malaysians	647	442	1,089
Indians and Pakistanis	464	86	550
Others	33	21	54
Unknown	5	..	5
Total ..	5,447	1,586	7,033
FEMALES			
Europeans	15	9	24
Eurasians	36	7	43
Chinese	3,131	705	3,836*
Malaysians	494	339	833
Indians and Pakistanis	208	40	248
Others	30	9	39
Unknown	3	..	3
Unknown sex and race	1	..	1
Total ..	3,918	1,109	5,027
Grand Total ..	9,365	2,695	12,060

*Includes one unknown sex.

DEATHS REGISTERED BY AGE GROUPS, 1952

Age	Urban Area	Rural Area	Total
Under 1 day	325	91	416
1 day and under 1 week ..	349	100	449
1 week and under 2 weeks ..	289	50	339
2 weeks and under 3 weeks ..	253	46	299
3 weeks and under 4 weeks ..	104	15	119
Neo-Natal Deaths ..	1,320	302	1,622
4 weeks and under 2 months ..	305	136	441
2 months and under 3 months ..	234	84	318
3 months and under 4 months ..	161	51	212
4 months and under 5 months ..	132	51	183
5 months and under 6 months ..	101	40	141
6 months and under 7 months ..	111	33	144
7 months and under 8 months ..	86	28	114
8 months and under 9 months ..	90	26	116
9 months and under 10 months ..	88	25	113
10 months and under 11 months ..	79	27	106
11 months and under 1 year ..	56	16	72
Infant Mortality ..	2,763	819	3,582

DEATHS REGISTERED BY AGE GROUPS, 1952—*continued*

Age			Urban Area	Rural Area	Total
1-4 years..	..	..	1,125	377	1,502
5-9 years..	..	..	249	69	318
10-14 years..	..	..	125	28	153
15-19 years..	..	..	150	50	200
20-24 years..	..	..	193	51	244
25-29 years..	..	..	203	55	258
30-34 years..	..	..	282	57	339
35-39 years..	..	..	345	80	425
40-44 years..	..	..	429	113	542
45-49 years..	..	..	532	101	633
50-54 years..	..	..	664	163	827
55-59 years..	..	..	579	131	710
60-64 years..	..	..	608	148	756
65-69 years..	..	..	413	131	544
70-74 years..	..	..	307	136	443
75-79 years..	..	..	197	92	289
80-84 years..	..	..	133	49	182
85 and over..	..	..	62	37	99
Unknown ..	..	..	6	8	14
Grand Total ..			9,365	2,695	12,060

DEATHS GROUPED ACCORDING TO AGE, SEX AND RACE, 1952

Age Group	Sex	Europeans	Eurasians	Chinese	Malaysians	Indians and Pakistanis	Others	Unknown	Unknown sex and race	Total
Under 1 day ..	M	4	1	164	43	25	2	2		242
	F	1	1	119	38	10	3	2	..	174
1 day and under 1 week	M	6	..	173	56	26	3	..	..	264
	F	3	2	131	31	14	3	..	..	184
1 week and under 2 weeks	M	..	..	150	15	13	3	..	..	181
	F	1	1	124	20	11	1	..	..	158
2 weeks and under 3 weeks	M	..	..	93	28	13	1	..	..	135
	F	..	1	138	14	11	..	..	..	164
3 weeks and under 4 weeks	M	1	1	32	15	1	1	..	..	51
	F	1	1	49	11	6	..	..	..	68
Neo-Natal Deaths	M & F	17	8	1,174	271	130	17	4	1	1,622*
Carried forward ..	M	11	2	613	157	78	10	2	1	874
	F	6	6	561	114	52	7	2	..	748

*Includes one unknown sex and race and one Chinese of unknown sex.

DEATHS GROUPED ACCORDING TO AGE, SEX AND RACE, 1952—continued

Age Group	Sex	Europeans	Eurasians	Chinese	Malaysians	Indians and Pakistanis	Others	Unknown	Unknown sex and race	Total
<i>Brought forward ..</i>	M	11	2	613	157	78	10	2	1	874
	F	6	6	561	114	52	7	2	..	748
4 weeks and under 2 months	M	1	..	136	87	19	3	..	..	246
	F	..	..	133	50	10	2	..	..	195
2 months and under 3 months	M	1	1	107	64	16	3	..	..	192
	F	..	1	91	28	5	1	..	..	126
3 months and under 4 months	M	..	..	62	40	8	..	..	..	110
	F	..	1	67	26	5	3	..	..	102
4 months and under 5 months	M	1	..	45	35	4	..	..	..	85
	F	1	1	67	19	8	2	..	..	98
5 months and under 6 months ..	M	1	..	54	26	..	1	..	..	82
	F	..	1	32	20	6	..	..	..	59
6 months and under 7 months ..	M	1	1	62	20	2	..	..	..	86
	F	..	..	36	16	5	1	..	..	58
7 months and under 8 months ..	M	..	..	42	16	6	..	..	..	64
	F	..	1	34	14	..	1	..	..	50
8 months and under 9 months ..	M	..	1	39	20	1	..	..	..	61
	F	..	..	35	18	2	..	..	..	55
9 months and under 10 months ..	M	..	..	47	14	4	1	..	..	66
	F	..	..	36	8	3	..	..	..	47
10 months and under 11 months ..	M	..	..	39	9	4	..	..	..	52
	F	..	..	43	9	2	..	..	..	54
11 months and under 1 year ..	M	1	..	19	6	3	1	..	..	30
	F	..	1	34	7	..	..	..	..	42
Infantile Mortality <i>Carried forward ..</i>	M	17	5	1,265	494	145	19	2	..	1,948
	F	7	12	1,169	329	98	17	2	..	1,634
Sub Total ..	M & F	24	17	2,434	823	243	36	4	1	3,582*

*Includes one unknown sex and race and one Chinese of unknown sex.

DEATHS GROUPED ACCORDING TO AGE, SEX AND RACE, 1952—continued

Age Group	Sex	Europeans	Eurasians	Chinese	Malaysians	Indians and Pakistanis	Others	Unknown	Unknown sex and race	Total
<i>Brought forward</i> ..	M	17	5	1,265	494	145	19	2		1,948
	F	7	12	1,169	329	98	17	2		1,634
1-4 years ..	M	4	3	580	151	38	1	..	..	777
	F	3	..	535	136	44	7	..	..	725
5-9 years ..	M	1	1	122	25	4	3	..	..	156
	F	..	..	129	22	10	1	..	..	162
10-14 years ..	M	..	..	79	17	3	..	..	..	99
	F	1	..	41	10	2	..	..	..	54
15-19 years ..	M	3	2	92	15	3	..	..	..	115
	F	..	1	60	23	1	..	..	..	85
20-24 years ..	M	10	1	78	24	7	1	..	..	121
	F	..	1	79	30	11	2	..	..	123
25-29 years ..	M	5	1	92	26	21	5	..	..	150
	F	2	1	68	27	10	..	..	..	108
30-34 years ..	M	5	2	137	25	42	1	..	..	212
	F	2	..	91	21	13	..	..	..	127
35-39 years ..	M	..	2	203	28	46	2	..	..	281
	F	1	1	114	21	7	..	..	..	144
40-44 years ..	M	2	..	277	37	35	4	..	..	355
	F	1	3	131	38	12	2	..	..	187
45-49 years ..	M	6	3	350	28	53	2	..	..	442
	F	1	..	151	32	7	..	..	..	191
<i>Carried forward</i> ..	M	53	20	3,275	870	397	38	2	..	4,656
	F	18	19	2,568	689	215	29	2	..	3,540

DEATHS GROUPED ACCORDING TO AGE, SEX AND RACE, 1952—continued

Age Group	Sex	Europeans	Eurasians	Chinese	Malaysians	Indians and Pakistanis	Others	Unknown	Unknown sex and race	Total
<i>Brought forward</i> ..	M	53	20	3,275	870	397	38	2	..	4,656
	F	18	19	2,568	689	215	29	2	..	3,540
50-54 years ..	M	8	6	438	61	63	6	..	..	582
	F	2	2	197	33	11	..	..	..	245
55-59 years ..	M	8	4	407	47	33	2	1	..	502
	F	..	3	175	20	7	3	..	..	208
60-64 years ..	M	3	4	438	34	36	2	..	..	517
	F	..	7	198	29	3	2	..	..	239
65-69 years ..	M	3	3	278	28	7	4	..	..	323
	F	2	2	194	16	5	2	..	..	221
70-74 years ..	M	3	3	200	19	3	1	..	..	229
	F	1	3	187	18	4	1	..	..	214
75-79 years ..	M	..	1	112	11	5	1	..	..	130
	F	1	5	143	9	..	1	..	..	159
80-84 years ..	M	1	..	50	9	4	..	..	..	64
	F	..	2	104	9	2	1	..	..	118
85 years and over	M	..	..	14	8	2	..	..	..	24
	F	..	..	66	8	1	..	..	..	75
Unknown ..	M	..	1	3	2	..	..	2	..	8
	F	..	..	3	2	..	..	1	..	6
Total ..	M	79	42	5,215	1,089	550	54	5	1	7,035
	F	24	43	3,835	833	248	39	3	..	5,025
Grand Total ..	M & F	103	85	9,050	1,922	798	93	8	1	12,060*

*Includes one unknown sex and race and one Chinese of unknown sex.

This year's crude death rate of 11.20 per 1,000 of the population is the lowest on record. The corresponding figures for the 3 previous years were 11.88 in 1951, 12.12 in 1950 and 11.84 in 1949. There were considerable proportionate drops in deaths from malaria and unspecified fevers, from pulmonary tuberculosis, from infantile convulsions and from diseases of the respiratory system. The general health of the Colony was remarkably good, bearing in mind the existing housing and social conditions.

MATERNAL MORTALITY

The maternal mortality rate was 1.80 per 1,000 live births this year as compared with 1.63 in 1951 and 1.85 in 1950. The present figures are very much lower than they were before the war; the corresponding rate in 1939 was 4.0.

INFANT MORTALITY

Race	1931		1947		1952	
	Infant Deaths Registered	Rate	Infant Deaths Registered	Rate	Infant Deaths Registered	Rate
Chinese	3,041	183.83	2,671	79.43	2,434	62.27
Malaysians ..	722	261.35	784	143.25	823	120.01
Indians and Pakistanis ..	171	163.73	236	76.45	243	66.19
Europeans ..	5	29.59	18	57.69	24	31.70
Eurasians ..	23	110.55	28	77.99	17	47.35
Others	34	149.78	21	113.51	36	78.28
Unknown ..	..	..	..	..	5	..
Total ..	3,996	191.30	3,758	87.33	3,582	69.97

The infant mortality rate is calculated on the number of deaths under 1 year of age per 1,000 live births.

The infant mortality rate of 69.97 infant deaths per 1,000 registered births was the lowest on record. The corresponding rate for 1951 was 75.15, whilst the 1939 figure was 130.43. Infant mortality rate soared to very high levels during the Japanese

occupation. The Chinese infant mortality rate was the lowest and the Indian rate was not very much higher than the Chinese rate as the above table shows. The Malay rate, whilst still comparatively high, is rapidly decreasing; the rate of 120.01 this year was very much lower than the corresponding figure of 136.75 in 1951.

MIGRATION STATISTICS BY SEA AND AIR DURING 1952

IMMIGRANTS

Race	ADULTS		CHILDREN		Total
	Male	Female	Male	Female	
Europeans	18,872	8,116	1,982	1,152	30,122
Eurasians	124	100	40	26	290
Chinese	19,628	6,641	2,152	1,477	29,898
Malaysians	3,537	1,100	335	328	5,300
Indians and Pakistanis ..	23,308	2,657	1,169	809	27,943
Japanese	86	10	1	..	97
Other Races	1,664	396	93	61	2,214
Total all Races ..	67,219	19,020	5,772	3,853	95,864

EMIGRANTS

Race	ADULTS		CHILDREN		Total
	Male	Female	Male	Female	
Europeans	18,844	7,757	1,680	1,064	29,345
Eurasians	81	56	20	15	172
Chinese	28,276	6,378	2,124	1,307	38,085
Malaysians	4,856	1,231	359	359	6,805
Indians and Pakistanis ..	16,094	1,962	1,068	754	19,878
Japanese	76	10	1	..	87
Other Races	1,510	445	155	115	2,225
Total all Races ..	69,737	17,839	5,407	3,614	96,597

**CHINESE DECK PASSENGERS FROM AND TO CHINA AND
HONGKONG, 1952**

Country	IMMIGRANTS				Total	EMIGRANTS				Total
	Adults		Children			Adults		Children		
	M.	F.	M.	F.		M.	F.	M.	F.	
China	1,349	1,578	693	452	4,072	4,305	866	560	448	6,179
Hong Kong	1,874	765	393	289	3,321	3,850	1,059	624	268	5,801
Total	3,223	2,343	1,086	741	7,393	8,155	1,925	1,184	716	11,980

COCOS-KEELING ISLANDS POPULATION, 1952—MID-YEAR

Chinese	..	..	..	18
Malaysians	..	..	..	406
Indians and Pakistanis	..	..	..	3
Europeans	..	..	..	123
Eurasians	..	..	..	—
Other Races	..	..	..	2
Total	..	..	..	552

A reduction of 665 over the last 12 months.

CHRISTMAS ISLAND POPULATION, 1952—MID-YEAR

Chinese	..	..	..	1,274
Malaysians	..	..	..	377
Indians and Pakistanis	..	..	..	6
Europeans	..	..	..	86
Eurasians	..	..	..	—
Other Races	..	..	..	—
Total	..	..	..	1,743

An increase of 221 over the last 12 months.

The large decrease in the number of Malaysians in Cocos Islands compared with the previous year is due to emigration. The large increase of Europeans is due to the temporary immigration into the Islands of Royal Australian Air Force personnel engaged in the construction of the airfield. The majority of the inhabitants of Christmas Island are only temporarily domiciled there and with the exception of the members of the public service all are employed by the British Phosphate Commission.

BIRTHS AND DEATHS, 1952

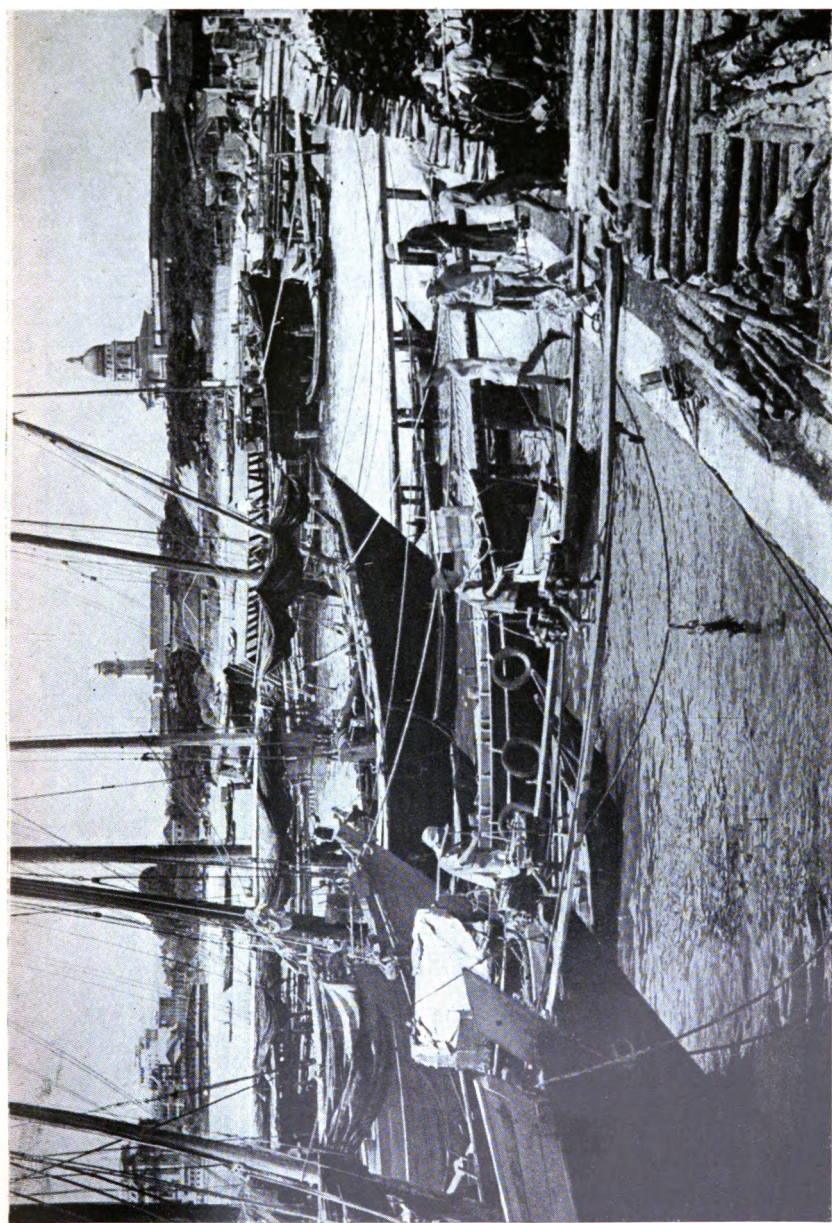
COCOS-KEELING ISLANDS				CHRISTMAS ISLAND			
		<i>Males</i>	<i>Females</i>			<i>Males</i>	<i>Females</i>
Births	..	6	12	Births	..	33	37
Deaths	..	4	3	Deaths	..	3	6



III

Occupations, Wages and Labour Organization

ALTHOUGH the year opened with ten disputes in industry and closed with eight disputes, and a strike at the Naval Base, the prevailing atmosphere between employers and their work-people was one of reasonable calm. Employment and wage levels reached in the previous year were well maintained. Trade union membership increased by over 5,000 and several modern factories were constructed. Broadly, the three economic factors which affect employment and wages in Singapore are the state of the entrepot trade, the state of the direct trade, and the extent of development of local manufacturing industries. In the entrepot trade, rubber is the most important item, and the continued decline in the price of the commodity in the early months of the year was expected to have a severe impact on employment and wages generally. In the event, only the rubber milling industry itself was affected to any degree and even here no urgent unemployment problem arose, the effects of retrenchment being partly offset by the generous 'compensation' terms granted to discharged workmen by their employers. Only two former employees of rubber mills registered for work with the Employment Exchange, though some of the rubber milling factories had closed down in 1951, and most of the rest closed for all practical



C. A. Gibson-Hill

Sailing barges unloading firewood at the Beach Road water front



C. A. Gibson-Hill

Lighters (twakow) in the Singapore River

purposes in March 1952, and with one exception had not re-opened by the end of the year. There had been serious fires in two of them. Nevertheless, over \$600,000 in 'compensation' was paid to just under 1,000 workmen who were thrown out of employment. In negotiations over 'compensation' terms, the workmen were represented by the Singapore Rubber Milling and Manufacturing Workers' Union, which was first registered in 1951 and became a competitor with the Union of Singapore Rubber Workers whose active Secretary died during the first few months of 1952. In all these negotiations the agreements were negotiated direct with each factory concerned and not with the employers' association, the Singapore Rubber Millers' Union, and in most cases an undertaking was given by the management to re-employ all discharged workmen should the factory concerned re-open.

In the case of the rubber factories the reason given by the employers for closure was shortage of raw material (slab rubber from Indonesia), but lack of markets was the reason given in the case of the temporary closing in April, of a big factory which manufactured electric torch batteries. This factory at first retrenched about half its workmen, but when the management refused to pay more than a fortnight's wages to those discharged, the remaining 300 workmen went on strike. The factory was therefore closed for about one month, after which work was resumed on the company's terms. During that period there were several incidents near the factory, and in May the President and Secretary of the Singapore Battery Manufacturing Workers' Union were arrested and charged with rioting. In August, another big factory, this time a shoe manufacturing concern, closed down and refused to grant demands for 'compensation' by the Rubber Shoe Workers' Union for the 600 workmen who were thrown out of employment. This factory re-opened in October and re-engaged about half its former workmen.

In spite of these closures, the following employment figures of manual workers collected in March and September showed

increases over the figures for the corresponding months in the previous year, and after taking into account the tendency for the coverage to be slightly extended from year to year, it is clear that no serious unemployment of manual workers occurred during 1952:—

		1951	1952
March	..	115,000	126,000
September	..	123,000	126,000

Although the figures for March and September 1952 were practically the same, it is likely that during the intervening six months the total fell by several thousands owing to the closure of factories in the rubber milling and other industries. Nevertheless by September the situation appears to have righted itself. The September figures show increases in the number employed in the stone quarrying, clay and sand pits, agriculture, fishing, distillery and printing and publishing industrial groups, of which the most spectacular was in the building and construction group which increased by over 3,000 from 12,740 to 15,963; there was also an increase of nearly 2,000 in the transport and storage group. The number employed by Government and City Council was 14,717; the Services employed 18,696 and Commerce and Industry 92,887. In spite of the decline in the entrepot trade in rubber early in the year therefore, employment levels were well maintained. The establishment during the year of a fishing net factory, a canning factory and a new biscuit factory may have had something to do with this, but it would be a mistake to assume that the setting up of new manufacturing enterprises locally will at all times be adequate to prevent unemployment in periods of recession in the entrepot trade or in the event of a falling-off in direct trade. The fact is that with a few exceptions, the tendency is for modern labour-saving machinery to be installed in new factories, with the consequence that the number of persons employed in them is comparatively small. As an insurance against unemployment, the establishment of such factories is therefore

of no immediate advantage in those industries in which the product has hitherto been manufactured by hand in a large number of small concerns; the latter will tend to be put out of business by the greater and more economical production capacity of the modern factory. But the construction of the factories, which are usually laid out and built on the most up-to-date lines, does give employment to workers in the building trade, and it may be that the increase already noted in the figures for the building and construction industry is partly attributable to this.

One difficulty facing those who wish to establish entirely new industries in Singapore is the lack of skilled local workmen capable of doing the work. This can be met to some extent by the temporary recruitment, for a limited period, of skilled workmen from elsewhere and this was done for a factory which was built for the manufacture of textiles, though it was not actually in production by the end of the year. Permission was given for skilled textile machinists to come to the Colony from Hong Kong for six to twelve months on an undertaking that they would train local workmen to do the job. Normally, the immigration, even for a limited period, of alien workmen is not encouraged, and apart from the case quoted above, the only other instance in which this occurred during the year was the recruitment in October and December of a total of seventy-two masons and carpenters from Hong Kong for urgent specialized work on the City Council's new Power Station under construction at Pasir Panjang. As a further means of improving the skill of workers in the building trade, it was decided in July to set up a school of building which would be constructed as an extension of the Junior Technical School and would consist of a day school designed primarily for youths and a free evening school designed for training older workmen. It has often been said, but it will bear repetition, that Singapore must develop new industries or face a serious unemployment problem and a lowering of standards of living. With the possibility of neighbouring countries undertaking more direct trade themselves,

the likelihood of the present population doubling itself in a generation or so from now, and in the absence of fairly considerable emigration, it seems vital that new employment possibilities should be discovered. It would be desirable for some development to take place in the production of vegetables and poultry for local consumption, but since any such development is not likely to be extensive enough to absorb a great number of employees, it is heartening that there were reports during the year of the probable establishment of factories for the manufacture of crown corks, boot polish, and rubber paint.

Many changes in wage-rates took place following negotiations between employers and employees or between employers and unions. Often the parties to the negotiations were assisted by a conciliation officer of the Labour Department, whose experience in disputes frequently helps both sides to reach an amicable agreement. In Singapore negotiations of this sort are seldom short; the basic cause of the dispute is all too often kept in the background for some considerable time while the parties manœuvre for position, and only patience and an ability to read between the lines of the argument enable the conciliator to discover what the dispute is really about. For this reason disputes often require careful handling and an understanding of the reactions of the workmen concerned. In one case a progressive employer wanted to introduce a graded wage scheme which would recognize long service without causing any loss in wages to any of the workmen concerned. The introduction of the scheme was strongly resisted by the workmen who argued that the same rate should be paid for the job to all workmen irrespective of the length of service. The nature of the work was agricultural, and in local agriculture increments for service are admittedly unusual. The installation of labour-saving machinery sometimes produces an unfavourable reaction from the workmen affected. In a rubber packing business an electric pressing machine was installed and at the same time the wage rate of the workmen who handled bundles of rubber was cut by two cents

per bundle. This cut was strongly resisted by the workmen at first, but when it had been explained to them that the new machine would enable them to earn considerably more, even on the reduced rate, than they had in the past, they dropped their objections. A transport company changed its drivers from monthly to daily rates in April. At first the drivers did not object because they earned more money, but in May they complained of loss of 'face' and asked to be put back on monthly rates.

If a dispute occurs which cannot be settled by negotiation or conciliation, the Commissioner for Labour can, with the consent of both parties, refer the matter, under the Industrial Courts Ordinance, to the Industrial Court or to arbitration for settlement. In September a dispute which had threatened to result in a strike, between the Government and City Council Labour Union, representing twenty-four Chinese stokers at the City Gas Works, and the City Council was referred in this way to the Industrial Court. The Court sat in October and issued its award in November. Under the award the stokers received increments for length of service, but there were no increases in the wage scales. A certain amount of difficulty was caused by the Court making 'recommendations' in addition to its award, because the City Council considered itself morally obliged only to implement the award and not the recommendations, whereas the Union felt that the recommendations also should be implemented forthwith. A strike very nearly took place over this issue, but the Union eventually agreed to accept the award only, on the understanding that the recommendations would be considered by the Council. The legislation covering Industrial Courts in the Colony is almost exactly the same as the United Kingdom legislation on this subject, which clearly envisaged a permanent Court which would be in more or less continuous session to deal with industrial disputes. In Singapore conditions are very different and it is only rarely that disputes ever get to the stage where a reference to the Court is necessary. In December, the Naval Base Labour Union, which had been negotiating with the Naval Base authorities over

claims which were formulated in August, asked that the whole matter be referred to a 'Local Industrial Court.' This, of course, was not possible, since it was a matter of fact that the local Industrial Courts Ordinance did not apply to the Services. Nevertheless, the Admiralty did agree to go to arbitration and were prepared to discuss the composition of a suitable arbitration body. In spite of this, the Union called a strike for the 29th December and about 8,500 industrial employees at the Naval Base stayed away from work. The strike was stopped early in the New Year after both parties had agreed to the Governor's nominating an independent arbitrator, with experience of Industrial Court work to make an *ad hoc* arbitration assisted by two assessors, one nominated by each side. Mention has already been made of the strike, in April, of employees at a big torch battery factory, and in May the Post and Telegraphs Uniformed Staff Union went on strike for thirteen days. Emergency arrangements made by the Postal Authorities prevented any serious breakdown in postal services, but inevitably some inconvenience was caused to the public. In the same month the main transport service of the City was brought to a standstill for one day when employees of the Singapore Traction Company stopped work over two employees who were charged in Court that day with criminal breach of trust in respect of small sums collected by them as fares. The public was not slow to condemn the Singapore Traction Company Employees' Union for its action, and a drift back to work started on the following day. A total of over 40,000 man-days was lost through strikes during the year, a considerable increase on the figures for the years 1950 and 1951.

Of the 68 major disputes dealt with by the Labour Department, 40 concerned wage-rates. Holidays with pay figured more prominently in demands submitted by workmen than in previous years. Unions of Government Employees were active in making claims throughout the year, and the Government was involved in negotiations with the Government and City Council Labour Union, the Public Works Labour Union, the Posts and Telegraphs

Uniformed Staff Union, the Mental Hospital Workers' Union, the Singapore Government Malay Teachers' Union, the Government Seamen's Union, the Singapore Government Administrative and Clerical Services Union, and the Telecommunications and Postal Clerical Services Union. In July, the first formal meeting of the Government Council for Negotiation was held. The Council was set up by agreement between the Singapore Government and trade unions of Government employees, including the Singapore Federation of Unions of Government Employees, to undertake consultation and negotiations on matters affecting Government servants in Divisions III and IV of the Public Service. It is a modification of Whitley Council machinery. Its establishment brought the total number of permanent bodies set up in the Colony for consultation and negotiation to eight, the total number of unions on those bodies to 27 and the total number of union members represented on such bodies to 18,761.

During the year, the number of unions of employees increased from 107 to 122, and union membership increased from 58,322 to 63,831. The number of employers' unions increased by two to a total of 42, with a membership of 5,321. Most of the new employees' unions registered were small ones organized on a departmental or shop basis and their establishment created a situation in which in some occupations or trades there were three or four unions endeavouring to enlist members. Of the four unions of employees which were removed from the register, three had ceased to exist and the fourth went into voluntary dissolution. Four other unions were called upon to show cause why their certificates of registration should not be cancelled. On the whole union administration was found to be satisfactory, and except for a few cases in which union activities were at a standstill, unions were more prompt to comply with the requirements of the law. The Singapore Trade Union Congress held its first Annual Congress in November, which was attended by 62 delegates representing 30 affiliated unions with an aggregate membership of approximately 23,000. It was reported that at

this Congress several amendments were made to the rules and objects of the T.U.C. in order to remove any doubt as to the nature and powers of the Congress. The composition of the Congress remained largely as originally constituted, with a preponderance of English-speaking unions: many large industrial unions have not so far affiliated. In June and July, the Singapore Government sponsored a series of classes on the history, structure and functions of trade unions and on many related subjects for local trade union officials. An eight-day course for English-speaking trade unionists was attended by 29 students representing 22 Singapore trade unions, and by four Burmese trade union leaders. This was followed by a series of vernacular lectures in Chinese, Tamil and Malay for those trade unionists who could not speak English. These lectures were attended by a total of 44 local trade unionists. The main lecturer was Mr. F. W. Dalley, C.B.E. an expert trade unionist who came specially for the course from the United Kingdom. He was assisted by officials of the Labour Department and other lecturers. This course was followed up by a distribution of literature, film show, and further lectures throughout the year. The Singapore Council for Adult Education held a course for Indian trade unionists with an officer of the Trade Union Adviser's Office as lecturer. During the year a number of visitors distinguished in the trade union movement spent a few days in Singapore and met local trade union leaders. Among these were Sir Vincent Tewson, General Secretary, British Trade Union Congress and Messrs. G. Mapara and D. Mungat, Asian regional representatives of the International Confederation of Free Trade Unions.

Most kinds of food and clothing were plentiful throughout the year, but rice and sugar continued to be rationed. Towards the end of August the price of rice was increased by five cents a kati from 32 cents to 37 cents, but the price of sugar was reduced very early in the year from 43 cents per kati to 38 cents per kati. The ration of rice was unchanged, but the sugar ration was

increased in August. The cost of living as reflected in a food and fuel budget compiled by the Registrar of Malayan Statistics, remained remarkably steady during the year. Nevertheless demands for wage increases were almost as frequent as they had been in 1951, and in many cases they were granted. These increases affected workmen employed in tin smelting, transport, dairy farming, Government, City Council, clay working and brick pressing.

The following are examples of daily rates paid in industry to workers in various occupations during the year:—

<i>Men</i>		<i>Women</i>	
	\$ c. \$ c.		\$ c. \$ c.
Bus drivers	.. 6.00— 9.50	Rubber packers	.. 2.10—3.00
Carpenters	.. 7.00—11.00	Bottle labellers	.. 1.50—2.50
Fitters	.. 3.50— 8.00		
Painters	.. 4.00— 8.00		

The rates of pay of unskilled labourers in industry varied, but the minimum rate paid by the Government exclusive of housing allowance was \$3.34 (males) and \$2.80 (females). With effect from 1st January, 1952 all the lowest grades of daily-rated employees of Government received an increase of 50 cents in their cost of living allowance. At the same time, part of the cost of living allowance of all Government employees equivalent to approximately 20 per cent of basic pay was consolidated with their basic pay.

Though the Labour Ordinance provides for a nine-hour day, most undertakings work for eight hours, and overtime at time and a half or more is normally paid thereafter. Although some factories remain open for seven days a week, no labourer can be compelled to work on more than six days a week, and the practice usually is for the workman to take a day off when he wishes. Night work is rare, and no women or children may work at night. Most of the bigger employers give their staff holidays with pay. In some cases they are given on public holidays or festival days and in other cases a consecutive period constituting an

annual holiday and a certain number of public holidays is granted. There are nevertheless a number of employers who give no holidays with pay at all. Maternity allowances are payable to female labourers under the Labour Ordinance. Free housing is usually provided in rubber estates, stone quarries, sawmills and rubber mills. The Government, the City Council, the Singapore Harbour Board and the Armed Services provide free housing for part of their labour forces. Transport to and from work is often provided by the employers, especially if the factory site is located in the rural areas. There is no Factories Ordinance in Singapore, but the services of a Chief Factories Inspector on secondment from the Factories Inspectorate in the United Kingdom were obtained during the year, to survey factory conditions and advise on their regulation. The Building By-laws made under the Municipal Ordinance (Cap. 133) have provisions concerning light, ventilation, insanitary sites, latrines, bath-houses, structural safety and fire-escapes. The Colony's only match factory, which employed over 240 people was closed during the year on a Court order owing to its dangerous condition. A sawmill was also closed on a Court order. All factories are inspected by officers of the Labour Department, and continual efforts are made to persuade employers to improve conditions. Out of 3,545 establishments known to employ manual workers, over 2,366 employ less than ten persons each.

Under the Weekly Holidays Ordinance, all shops except those engaged in the sale of motor fuel, in undertaking, or the business of pharmacists, and a few other exceptions, are required to close for one whole day in every week, and employees must be given a full day's paid holiday. The shop-keeper is permitted to choose the day on which the shop shall be closed. Out of just over 14,700 shops, about 10,700 remained closed on Sunday. During the year 315 shop-keepers were convicted for offences under the Ordinance, considerably fewer than in the previous year, and there is ground for hope that over the course of years evasion

of this law will become negligible. For the time being, however, unceasing vigilance on the part of the Labour Inspectorate is necessary.

The Government Junior Technical Trade School provides technical instruction for boys of secondary school age in such subjects as mechanical and electrical engineering, plumbing and radio. In-plant training is provided by a number of private firms and Government Departments, many of whom also run apprenticeship schemes. The results of the first full year's working of the scheme for retraining and rehabilitating workmen were not discouraging. Eighty-nine disabled persons were registered during the year and about half were placed in employment or received training. The firms which originally agreed to support the scheme have taken most of the trainees. Although there is no compulsion on the employer to employ the disabled person after the period of training, in practice most trainees continue to be employed in the firm in which they are trained. The scheme is administered by the Labour Department assisted by a Technical Selection Committee which makes recommendations on suitable kinds of employment for the various forms of disablement which are brought to its notice. It has been the policy to obtain as far as possible, a type of work which has an employment value rather than one which is unskilled and merely provides a subsistence wage. The Labour Department continued to act for injured workmen in compensation cases. A total of 2,844 cases were reported to the Commissioner for Workmen's Compensation of which 43 were fatal, 89 were cases of permanent disablement, and 2,711 were cases of temporary disablement. One application for compensation for permanent disablement was dismissed by the Commissioner and eight cases were awaiting settlement at the end of the year. The total amount awarded by the Commissioner in 46 cases which he heard was \$110,579.17. Although the figure for the total number of accidents is 361 greater than last year, the number of permanent disablements was slightly

fewer, and the number of fatal accidents dropped by nearly 40 per cent. The Machinery Inspectorate was considerably strengthened during the year, and carried out inspections in 845 establishments where power-operated machinery was being used.

Under the Children and Young Persons Ordinance children under seventeen taking part in public entertainment are required to hold a licence and must be medically examined. During the year 222 such licences were issued. These children and young persons are employed in theatres, musical troupes, cafes and cabarets, which are all frequently inspected by day and night by the Labour Inspectorate. No cases of serious ill-treatment of children were discovered. The minimum age for the employment of children in factories is 14 years, and the hours which may be worked by young persons without a break are regulated. The number of young persons, i.e. persons of less than 18 years of age, employed as labourers in September was 3,793, the industries employing most being the engineering, ship-building and printing industries. There were 15,635 women employed as labourers at the same date, over 14,000 of them being Chinese. The principal employing industries were building and construction, rubber grading and packing, and rubber goods manufacture, followed by laundry services, defence services, transport and communication, printing and book-binding, rubber milling, and rubber tapping. Women workers at a large rubber packing godown were extremely enthusiastic over 'live' entertainment put on for their benefit at lunchtime by Radio Malaya at the suggestion of the management. This firm was one of the first in Singapore to introduce 'music while you work' at the place of employment.

The Labour Department administers the labour laws which include the Labour Ordinance, the Trade Unions Ordinance, the Machinery Ordinance, the Weekly Holidays Ordinance, part of the Children and Young Persons Ordinance and the Industrial Courts Ordinance. Its inspection duties include the

inspection of over 3,500 places where labourers are employed, and the inspection of over 14,000 shops for the purposes of the Weekly Holidays Ordinance. There is provision in the Labour Ordinance for the adjudication of disputes between employers and labourers relating to wages, conditions of employment, advances of money, or the keeping of accounts. These disputes are heard by an officer of the Labour Department from whose decision appeal may be made to the High Court. The system commends itself to those concerned since decisions are made by officers well versed in the customs and languages of the litigants, and are given with the minimum of delay, at no expense to the parties. During the year 329 cases were instituted and a total amount of \$97,917.85 was ordered to be paid to complainants. The Labour Department also operates an Employment Exchange in the Labour Department's main office building, which is situated in the centre of Singapore City. During the year, 17,184 persons registered for employment, and 9,967 were successfully placed. Of this latter number 2,636 were women. Over 5,800 persons registered for work as domestic servants, and over 8,600 for semi-skilled and unskilled work. Of the persons making use of the Exchange, about half were Indians and Malays, a fairly high proportion considering that the Chinese form over two-thirds of the local population. The Labour Advisory Board, which is a tri-partite Board consisting of representatives of Government, employers and workers, advised Government on labour matters throughout the year. Amongst the many subjects discussed by the Board were fair wages clauses in public contracts, workmen's compensation legislation, rice rations, retirement benefits, the National Service Bill, annual holidays with pay, annual reports to the International Labour Organization on the application of International Labour Conventions and a draft Wages Councils Bill which was subsequently introduced into the Legislative Council, but had not been passed by the end of the year.



IV

Public Finance and Taxation

PUBLIC FINANCE

THIS YEAR, the public finances of the Colony continued their healthy trend. Although the original estimated surplus when the budget was first presented amounted to \$5.77 millions, the latest available figures show that the surplus on the year's workings is likely to be \$38.3 millions. The General Revenue Balance has increased from \$156.75 millions at the end of 1951 to \$195.09 millions by the end of this year.

The latest estimate of revenue for the year is \$200.08 millions. This represents an increase of over \$25 millions on the original estimate. Increased income tax receipts have been mainly responsible for this, \$72.77 millions being collected during the year against the estimate of \$55 millions. Revenue from liquor duties has also been in excess of the original estimate by more than \$3.6 millions. The Colony's four main sources of revenue, income tax and duties on liquor, tobacco and petroleum, accounted for \$142.63 millions or 71.3 per cent of the total revenue of \$200.08 millions.

Expenditure has amounted to \$161.74 millions which is below the original estimate of \$169.07 millions before allowing for supplementary expenditure of \$46.03 millions which has been

authorized during the year. Once again failure to complete the heavy building programme has been mainly responsible for this, which in its turn has had a delaying effect on the development programmes of departments such as the Education, Medical and Social Welfare Departments. However, the Public Works Department has recently been able to recruit additional staff to fill vacancies and to expand its establishment. This, together with a five-year building programme due to start in 1953, will enable development to proceed at an accelerated pace.

Turning to particular heads of expenditure, \$7.85 millions has been expended under Civil Aviation. This is a substantial increase over the 1951 figure of \$1.19 millions and is accounted for by heavy expenditure on Singapore's new International Airport at Paya Lebar on which excellent progress has been made. Expenditure on Education and Medical services has risen over the previous year by some \$3.4 millions in each case. On these two services \$31.3 millions was spent this year, which is just over 19.1 per cent of the Colony's total expenditure. There has also been a large increase under Head "Miscellaneous Services", \$34.53 millions being the latest estimate of the total expended. Of this figure, \$8 millions has been spent on land purchases for housing development and squatter resettlement, while \$8.57 millions has been remitted to Her Majesty's Government as a special defence contribution. Expenditure on projects financed by grants from the Colonial Development and Welfare Fund has amounted to \$544,482.

Appendix A at the end of this Chapter gives full details of the latest revenue and expenditure figures which are available. The actual figures for the two previous years are included for purposes of comparison. A statement of assets and liabilities is also included at Appendix B at the end of this Chapter. A summary of the revenue and expenditure is given below:—

	1950		1951		1952	
	\$	c.	\$	c.	\$	c.
Revenue	.. 114,016,040	41	175,607,908	75	200,084,274	00
Expenditure	.. 97,117,473	94	127,397,182	72	161,742,659	00
Surplus	.. 16,898,566	47	48,210,726	03	38,341,615	00

PUBLIC DEBT

The total Public Debt of the Colony is \$115,000,000 of which the greater portion is in respect of the former Straits Settlements Government and still requires to be adjusted with the Government of the Federation of Malaya. Provision for sinking funds and payment of interest amounted this year to \$5.95 millions, which is less than 3.4 per cent of the total revenue of the Colony. Details of the individual loans are shown below:—

Description	Amount	Interest payable	Earliest date of repayment
	\$		
S.S. 3% Loan 1962/1972	30,000,000	15th April; 15th Oct.	15th April, 1962
S.S. 3% War Loan 1952/ 1959	25,000,000	April; Oct.	1st Oct., 1952
S.S. 3% War Loan 1953/ 1960	10,000,000	15th Jan; 15th July	15th July, 1953
Total, S.S. ..	65,000,000		
Singapore 3% Rehabilitation Loan 1962/1970 ..	50,000,000	15th Jan; 15th July	15th July, 1962
Total, S.S. and Singapore	115,000,000		

TAXATION

Mention has been made already of Singapore's main sources of revenue, income tax and liquor, tobacco and petroleum duties. The chief forms of subsidiary taxation are Entertainments Duty, Estate Duty, Stamp Duty and taxation on Totalisator Bets and Sweepstakes. Notes on each of these forms of taxation

follow. The table below gives the latest details of the yield for this year together with comparative figures for 1951 and the original 1952 estimate:—

Head	1951 (Actual)		1952 (Estimated)		1952 (Provisional)	
	\$	c.	\$	c.	\$	c.
Entertainments ..	4,545,625	30	4,500,000	00	5,232,087	00
Estates ..	4,325,501	07	4,000,000	00	4,577,853	00
Income Tax ..	50,458,526	26	55,000,000	00	72,767,301	00
Liquors ..	19,819,703	99	18,700,000	00	22,124,874	00
Petroleum ..	12,048,012	65	12,503,900	00	14,006,053	00
Stamps ..	1,523,831	68	1,600,000	00	1,782,088	00
Tobacco ..	32,291,826	66	32,027,000	00	33,728,041	00
Totalisator Bets and Sweepstakes ..	4,529,660	74	4,250,000	00	4,205,814	00
	129,542,688	35	132,580,900	00	158,424,111	00

During the year, a bill was passed providing for a 20 per cent duty to be collected on private lotteries.

INCOME TAX

Income tax, first introduced with effect from 1st January, 1948, is levied on incomes accruing in or derived from the Colony or received in the Colony from outside sources. Companies are chargeable at 30 per cent. Resident individuals are charged on a sliding scale ranging from 3 per cent on the first \$500 of chargeable income to 30 per cent on incomes exceeding \$50,000, with personal allowances as shown in the following paragraph. Non-resident individuals are chargeable at 20 per cent without these allowances, although British subjects and British protected individuals may be entitled to a proportionate deduction. Income tax is levied in both the Federation of Malaya and the Colony at the same rates. Double taxation arrangements are in force with the United Kingdom and the Federation of Malaya.

The rates of tax on individuals are as follows:—

<i>Chargeable Income</i>	<i>\$</i>	<i>Rate of Tax</i>
On the first	500 ..	.. 3 per cent
On the next	500 ..	.. 4 per cent
On the next	500 ..	.. 5 per cent
On the next	500 ..	.. 6 per cent
On the next	1,000 ..	.. 7 per cent
On the next	2,000 ..	.. 8 per cent
On the next	2,000 ..	.. 10 per cent
On the next	3,000 ..	.. 15 per cent
On the next	35,000 ..	.. 20 per cent
On every dollar exceeding	50,000 ..	.. 30 per cent

The above rates are charged on an individual's assessable income less the following deductions for personal reliefs:—

	<i>\$</i>
Unmarried person .. ..	.. 3,000
Married couple .. ..	.. 5,000
Married couple with 1 child ..	.. 5,750
Married couple with 2 children ..	.. 6,250
Married couple with 3 children ..	.. 6,750
Married couple with 4 children ..	.. 7,050
Married couple with 5 children ..	.. 7,350
thereafter \$200 per child up to a maximum of	8,150

Where children are maintained and educated outside Malaya the above allowances may be increased up to double the amounts shown. Deductions are also allowed for life insurance premiums and for contributions to approved pension or provident funds.

This year there were approximately 20,000 taxpayers. Net collections have amounted to \$72.77 millions, an increase of more than \$22 millions over 1951.

CUSTOMS DUTIES

Situated at the junction of the main sea routes in South-East Asia, Singapore is still essentially a free port. Machinery and materials enter free of duty and every encouragement is given to entrepot trade. Duties are collected only on intoxicating liquors, tobacco and petroleum.

Full and preferential duties are imposed on imported liquors at the time of their release for local consumption. There are also excise duties on intoxicating liquors distilled locally, or prepared in bond and released for local consumption. Samsu,

beer and stout are the only intoxicating liquors made locally. During the year the rates of duty on beer, whisky, brandy and toddy were increased, but reductions were made for still wines. For some items the rates are on a lower scale than those in the Federation of Malaya.

The scale of duties on tobacco remained unchanged throughout the year. The duty on petroleum is sixty-eight cents per gallon while on kerosene a duty of five cents per gallon is levied. Although no duties are charged on heavy oils, a special tax is levied under the provisions of the Petroleum Ordinance on engines using such oils.

Full details of the rates of duty payable on liquors and tobacco are given in Appendix C at the end of this Chapter.

ENTERTAINMENTS DUTY

Entertainments duty is levied on the following scales:—

	cents.
Where the payment for admission (including the amount of the duty) does not exceed 10 cents ..	.. none
exceeds 10 cents but does not exceed 20 cents ..	.. 5
exceeds 20 cents but does not exceed 30 cents ..	.. 10
exceeds 30 cents but does not exceed 50 cents ..	.. 15
exceeds 50 cents but does not exceed \$1 ..	.. 25
exceeds \$1 but does not exceed \$1.50 ..	.. 40
and thereafter an additional 20 cents of entertainment duty for every increase of 50 cents in payment for admission.	

From the 1st January this year only half the above rates have been charged for 'live' entertainments such as stage shows and musical performances.

ESTATE DUTY

Estate duty is payable on the capital value of all property which passes on death. Remission of duty on the first \$40,000 of property passing to certain specified relatives is allowed in respect of war casualties during the period 3rd September, 1939 to 1st October, 1946, and in respect of deaths as a result of the Emergency. A further remission is made on all *ex-gratia* awards in respect of War Damage payable under the War Damage Ordinance, 1949.

The rates of estate duty form a graduated scale rising from 1 per cent on estates of over \$1,000 to 40 per cent on estates valued at over \$5 millions.

DUTIES ON TOTALISATOR BETS AND SWEEPSTAKES

Duties in respect of totalisator bets are collected at the rate of 10 per cent. For sweepstakes the rate of duty is 20 per cent. The combined revenue for the year 1952 was \$4.2 millions, a drop of .3 million on the yield for the previous year. The Singapore Turf Club is the main contributor as shown by the figures below:

	\$
(a) Duty on Totalisator Bets paid by the Singapore Turf Club	1,069,256
(b) Duty on Sweepstakes paid by the Singapore Turf Club	3,123,424
(c) Duty on Sweepstakes paid by other Clubs, Associations or Societies	13,134
	4,205,814

Fresh legislation was introduced towards the end of the year for the control of private lotteries. Duty at the rate of 20 per cent is payable by the promoters of such lotteries who require to hold a permit from the Financial Secretary.

STAMP DUTIES

Stamp duties are payable on a wide range of commercial and legal documents specified under the Stamp Ordinance. In some cases the duty is a fixed amount, as on an agreement or statutory declaration; in others it is an *ad valorem* duty, such as on the amount of the consideration money in a conveyance of property or on the amount secured in a mortgage. In certain cases, it is obligatory to use impressed stamps which can be obtained only from the Stamp Office; in other cases ordinary postage stamps can be used.

During the year seven remission orders were made in favour of foreign Governments in respect of leases and conveyances. Twelve licences were issued for the use of postal franking

machines. Many of the stamp duties were increased from the 25th June, 1952, following the passing of the Stamp (Amendment) Ordinance, 1952.

LOCAL AUTHORITIES

The two local authorities operating in the Colony are the City Council and the Rural Board. Summaries of their revenue and expenditure are given in the following paragraphs.

CITY COUNCIL

The income and expenditure figures for 1950, 1951 and those estimated for this year and a statement of the City's debt as at 31st December this year is shown in the tables on pages 68 and 69.

RURAL BOARD

Although the Rural Board collects its own rates and various fees and licences, and receives also a proportion of the vehicle taxes collected by the City Council, the revenue received does not cover the total expenditure. The deficit is met by a contribution from the Singapore Government. Over the past three years, expenditure has doubled and with the greater development of the rural areas further increases are to be expected.

This year, the total expenditure of the Board amounted to \$3.46 millions. Revenue collected was \$2.19 millions, the Government contribution being \$1.27 millions. The main heads of revenue and expenditure are as follows:—

1952

Revenue			Expenditure				
	\$	c.		\$	c.	\$	c.
Rates	..	828,699	03	General			
Taxes	..	694,932	19	Recurrent	..	802,389	95
Licences	..	97,082	00	Special	..	113,621	01
Fees	..	347,197	25				916,010 96
Others	..	218,160	80	Health			
				Recurrent	..	577,626	75
		2,186,071	27	Special	..	33,085	25
							610,712 00
Government Contribution		1,277,548	61	Public Works			
				Recurrent	..	674,035	59
				Special	..	1,262,861	33
							1,936,896 92
		3,463,619	88				3,463,619 88

CITY COUNCIL OF SINGAPORE
INCOME AND EXPENDITURE

	INCOME			EXPENDITURE		
	1950 (Actual)	1951 (Actual)	1952 (Revised Estimate)	1950 (Actual)	1951 (Actual)	1952 (Revised Estimate)
	\$	\$	\$	\$	\$	\$
Consolidated Rate Fund ..	19,877,987	25,046,870	26,661,426	17,750,420	22,808,287	27,008,670
Electricity Department ..	12,669,980	14,077,639	14,477,400	11,373,816	13,202,390	18,213,937
Gas Department ..	1,995,024	2,812,420	3,540,000	1,986,599	3,029,026	4,296,530
Water Department ..	7,771,652	9,183,664	10,916,990	7,713,723	8,880,008	10,810,649
Total ..	42,314,643	51,120,593	55,595,816	38,824,558	47,919,711	60,329,786

CITY COUNCIL OF SINGAPORE

PUBLIC DEBT AS AT 31ST DECEMBER, 1952

Description	Amount \$ c.	Interest Payable		Earliest date of Redemption
DOLLAR DEBENTURE STOCKS				
4½ % Singapore Municipal Debenture Stock 1955 ..	687,900 00	31st March	30th Sept.	30th September, 1955
4 % Singapore Municipal Debenture Stock 1963 Series B ..	1,528,477 00	31st March	30th Sept.	30th September, 1963
5 % Singapore Municipal Debenture Stock 1956/1966 ..	22,000,000 00	1st May	1st Nov.	1st May, 1956
4½ % Singapore Municipal Debenture Stock 1970/1980 ..	6,000,000 00	1st March	1st Sept.	1st September, 1970
3 % Singapore Municipal Debenture Stock 1958 ..	4,000,000 00	15th May	15th Nov.	15th May, 1958
3 % Singapore Municipal Debenture Stock 1962 ..	2,750,000 00	15th May	15th Nov.	15th May, 1962
3 % Singapore Municipal Debenture Stock 1975/1985 ..	4,000,000 00	1st April	1st Oct.	1st April, 1975
4 % Singapore Municipal Debenture Stock 1959 ..	5,000,000 00	31st March	30th Sept.	30th September, 1959
3½ % Singapore Municipal Debenture Stock 1968/1973 ..	30,000,000 00	20th Jan.	20th July	20th July, 1968
3½ % Singapore Municipal Debenture Stock 1961/1971 ..	25,000,000 00	31st March	30th Sept.	30th September, 1961
5 % Singapore City Council Debenture Stock 1962/1972 ..	25,000,000 00	1st March	1st Sept.	1st September, 1962
3 % Government of the Colony of Singapore Loan 1949 ..	9,041,500 00	..	..	..
Total Dollar Debenture Stocks ..	135,007,877 00			
4 % Singapore Municipal Debenture Stock 1963 Series B (£300,000 @ 2/4) ..	2,571,428 57	31st March	30th Sept.	30th September, 1963
Total Public Debt ..	137,579,305 57			

Note:—There are Sinking Fund accumulations amounting to approximately \$35 millions as at 31st December, 1952.

STATEMENT OF REVENUE AND EXPENDITURE FOR 1952 WITH COMPARATIVE FIGURES FOR 1950 AND 1951

Revenue Head	1950 (Actual)	1951 (Actual)	1952 (Provisional)	Expenditure Head	1950 (Actual)	1951 (Actual)	1952 (Provisional)
CLASS I							
Licences, Excise and Internal Revenue not otherwise classified:—							
(a) Entertainments Duty ..	3,385,608	4,545,625	5,232,087	1. Charge on account of Public Debt	8,092,857	5,950,000	5,950,000
(b) Estate Duties ..	2,897,256	4,325,501	4,577,853	2. Pensions, Retired Allowances, Gratuities, etc. ..	4,361,389	5,041,180	5,145,098
(c) Income Tax ..	26,532,557	50,458,526	72,767,301	3. Charitable Allowances and Contributions ..	89,350	247,217	330,211
(d) Liquors ..	13,278,704	19,819,704	22,124,874	4. Commissioner-General ..	414,113	606,616	534,212
(e) Petroleum Revenue ..	10,295,563	12,048,013	14,006,053	5. Governor ..	182,458	304,629	342,166
(f) Stamp Duties ..	979,991	1,523,832	1,782,088	Malayan Civil Service ..	482,075	84,152	..
(g) Tobacco Duties ..	25,226,295	32,291,826	33,728,041	Administrative Service, Part I ..	28,696	..	..
(h) Totalisator and Sweepstakes ..	2,582,882	4,529,661	4,205,814	6. Colonial Secretary ..	1,675,252	3,726,914	..
(i) Others ..	3,571,835	5,408,858	5,841,298	7. Agricultural ..	494,670	1,425,528	2,047,675
				8. Audit ..	96,006	28,975	29,858
				9. Broadcasting ..	2,028,449	163,751	378,434
				10. Chemistry ..	126,718	209,087	253,646
				11. Chinese Secretariat ..	189,036	189,258	216,850
				12. Civil Aviation ..	1,064,660	1,187,720	226,380
				13. Co-operative Societies ..	23,712	32,244	78,484
				14. Customs & Excise ..	982,297	1,977,497	2,425,706
				15. Defence Services ..	3,277,702	3,493,617	6,706,415
				16. Education ..	6,298,919	12,433,271	15,870,485
				17. Estate Duty Office ..	173,142	110,614	115,556
				18. Film Censorship ..	164,494	150,941	92,867
				19. Fisheries ..	163,139	143,135	178,993
				20. Foreign Exchange Control ..	186,597	233,761	275,089
				21. Forests ..	31,270	56,214	64,809
				22. Gardens, Botanical ..	204,590	310,153	348,638
CLASS II							
Fees of Court or Office, Payments for Specific Services and Reimbursements-in-Aid ..	6,671,698	14,439,809	11,143,929				
Total ..	88,750,691	134,951,546	164,265,409				

CLASS III	9,384,168	11,463,396	11,632,308	Immigration and Passports	295,977	499,402	600,345
Posts and Telecommunications				24. Imports and Exports Control	187,505	266,688	311,309
				25. Income Tax	391,677	667,746	958,667
				26. Judicial ..	459,754	1,001,275	1,190,041
				27. Labour ..	124,026	395,147	557,591
				28. Land and District Offices	131,351	396,568	609,356
				29. Legal ..	104,372	185,675	222,416
				30. Marine ..	695,235	687,368	851,118
				31. Marine Surveys	62,694	124,074	152,834
				32. Medical and Health	7,000,780	12,047,616	15,403,694
				33. Meteorological	363,029	507,203	446,762
				34. Miscellaneous Services	27,804,059	25,212,345	34,531,038
				35. Museum and Library	64,868	164,458	197,889
				36. Official Assignee	57,805	148,041	222,520
				37. Police ..	8,237,942	17,077,920	20,225,487
				38. Postal Services	4,382,198	5,684,446	5,975,982
				39. Printing Office	631,530	1,459,349	1,755,849
				40. Prisons ..	1,136,152	1,869,926	2,126,308
				41. Public Services Commission	..	81,283	89,552
				42. Public Works	669,202	1,315,902	1,772,363
				43. Public Works Recurrent	3,953,243	4,620,371	5,898,341
				44. Public Works Extraordinary	5,312,361	6,630,466	6,877,893
				45. Registrar of Marriages	..	4,862	15,574
				46. Social Welfare	1,334,917	2,079,806	3,477,633
				47. Statistics ..	422,215	384,060	775,849
				48. Subventions	33,482	..	..
				49. Survey ..	246,218	449,297	562,795
				50. Telecommunications	1,995,123	2,574,592	2,809,949
				51. Trade Marks	59,584	36,553	79,648
				52. Trade Unions	..	50,685	43,958
				53. Treasury ..	138,056	247,659	511,491
				54. Veterinary	91,709	150,371	202,730
				Contribution from Colonial Development and Welfare Fund	..	227,781	451,880
Total ..	114,016,040	175,607,908	200,084,274	Total ..	97,117,473	127,397,183	161,742,659
CLASS V							
Miscellaneous Receipts	3,178,962	5,530,480	3,674,364				
Land Sales and Premia on Grants	31,395	25,581	40,291				
Total ..	3,210,357	5,556,061	3,714,655				
CLASS VI							
Grants from the Colonial Development and Welfare Fund..	69,857	512,814	388,671				
Total ..	114,016,040	175,607,908	200,084,274	Total ..	97,117,473	127,397,183	161,742,659

General Revenue Balance as on		
31-12-50	112,370,756	
.. .. .	\$	
Revenue for 1951	175,295,833	
Expenditure for 1951	127,397,183	
	<u>47,898,650</u>	
Less:—	160,269,406	
(a) Depreciation on Investments	3,513,225	
(b) Loss on Redemption	1,518	
	<u>3,514,743</u>	
	156,754,663	156,754,663
Add:—		
Revenue for the year 1952 (Provisional)	200,084,274	
Less:—		
Expenditure for the year 1952 (Provisional)	161,742,659	
	<u>38,341,615</u>	
	195,096,278	
Due to the Federation of Malaya and North Borneo in respect of division of S.S. Assets and Liabilities	33,500,000	
Net Singapore Balance	161,596,278	
	<u>195,096,278</u>	
Total ..	298,470,431	330,508,657

ADVANCES:—		
Malaya (Unallocated) Account Supplies	..	72,281,632
Ministry of Food (Singapore) Account	..	17,779,821
Building Loans .. .. .	..	13,451
Other Governments .. .. .	..	125,667
Miscellaneous .. .. .	..	15,338,755
Imprests .. .. .	..	429
Suspense Account Miscellaneous ..	..	1,429,372
		<u>72,281,632</u>
		72,281,632
LOANS:—		
Municipality, Malacca	..	738,433
Kelantan Government	..	4,733,184
Trengganu Government	..	2,560,000
Singapore Harbour Board	..	14,756,937
Singapore Harbour Board	..	2,213,726
Mohammedan and Hindu Endowment Board, Penang	..	44,676
Penang Sports Club .. .. .	..	56,227
St. Nicholas Home, Penang	..	4,000
Singapore Chinese Girls School ..	..	15,290
Singapore Improvement Trust (1948)	..	4,560,000
Singapore Improvement Trust (1949)	..	4,720,000
Singapore Improvement Trust (1950)	..	9,000,000
Singapore Improvement Trust (1951)	..	—
Singapore City Council	..	10,290,000
		<u>72,281,632</u>
		72,281,632
Total ..	298,470,431	330,508,657

APPENDIX C

DUTIES ON INTOXICATING LIQUORS

Item	Unit	DUTIES		
		Full	Pref- erence	Excise
		\$ c.	\$ c.	\$ c.
1. Rectified spirit	p.g.	52 50	..	..
2. Brandy	p.g.	61 50	53 80	..
3. Brandy in bottle not exceeding 81 per cent proof spirit	g.	48 00	42 00	..
4. Rum and Gin	p.g.	52 50	..	..
5. Rum and Gin in bottle not exceeding 81 per cent proof spirit	g.	37 50	..	..
6. Whisky	p.g.	61 50	..	..
7. Whisky in bottle not exceeding 81 per cent proof spirit	g.	48 00	..	..
8. Other intoxicating liquors	p.g.	..	..	43 75
9. Toddy-arrack, Saki, Pineapple spirit and Samsu (including Medicated Samsu) ..	p.g.	27 00	..	24 00
10. Bitters and Liqueurs not exceeding 100 per cent proof spirit	g.	52 50	..	..
11. Sparkling wines not exceeding 42 per cent proof spirit	g.	40 00	30 00	..
12. Still wines exceeding 26 per cent but not exceeding 42 per cent proof spirit ..	g.	15 00	11 25	..
13. Still wines not exceeding 26 per cent proof spirit	g.	7 50	5 60	..
14. Ale, Beer, Stout, Porter, Cider and Perry	g.	4 00	3 60	3 60

p.g.=proof gallon.

g.=gallon.

DUTIES ON TOBACCO

Item	Unit	DUTIES	
		Full	Pref- erence
		\$ c.	\$ c.
1. Cigars and snuff	per lb.	11 00	10 00
2. Cigarettes	per lb.	6 70	6 20
3. Unmanufactured tobacco	per lb.	4 40	4 20
4. Manufactured tobacco—imported in con- tainers of any kind for retail sale to the public	per lb.	6 90	6 70
5. Manufactured tobacco (excluding cigars, cigarettes and snuff) not otherwise pro- vided for	per lb.	2 50	..



V

Currency and Banking

CURRENCY

CURRENCY issued by the Board of Commissioners of Currency, Malaya and British Borneo, is the only legal tender in the Colony and its dependencies, Christmas and Cocos Islands. The standard unit of currency is the Malayan dollar, which is on the sterling exchange standard and fixed at *2s.4d.* This currency is also legal tender throughout the Federation of Malaya, Sarawak, North Borneo and Brunei.

The following types of currency are issued by the Currency Commissioners and were in circulation as legal tender during the year:—

- (i) Currency notes bearing the inscription of the Board of Commissioners of Currency, Malaya, and bearing dates not earlier than 1st July, 1941 in denominations of one, five, ten, twenty and fifty cents, for the payment of any amount not exceeding two dollars.
- (ii) Currency notes bearing the inscription of the Board of Commissioners of Currency, Malaya, and bearing dates not earlier than 1st July, 1941 in denominations of one, five, ten, fifty, one hundred, one thousand and ten thousand dollars, for the payment of any amount.

- (iii) Silver dollars for any amount not exceeding ten dollars.
- (iv) Silver half-dollars and subsidiary silver coin in denominations of five, ten and twenty cents and nickel coin of five cents denomination, of any amount not exceeding two dollars.
- (v) Cupro-nickel coin in denominations of five, ten and twenty cents, for any amount not exceeding two dollars.
- (vi) Copper and bronze coin in denominations of one quarter and of one half of one cent, and one cent, for any amount not exceeding two dollars.

All notes and cupro-nickel coins mentioned above were issued into circulation subsequent to the liberation of Malaya in September 1945; all silver coins mentioned above were demonetised and ceased to be legal tender after 31st December, 1952. Copper and bronze coin has been issued both before and since the war.

No figures of actual circulation can be given for Singapore alone. The figures given below show total currency in circulation on 31st December, 1952 in the several territories, including currency which may be circulating in adjoining foreign countries.

\$		
Notes	..	.. 786,797,439
Silver Coin	..	.. 23,186,791
Other Coin	..	.. 25,263,669
		835,247,899

Up to the end of January, currency circulation expanded by \$27 millions on account of sterling deposits in the Currency Fund, but generally speaking the startling increases which occurred in 1950 and 1951 were arrested on account of the sharp fall in the price of rubber which started early in the year. From February circulation remained constant at about \$835 millions, as compared with total circulation of \$808 millions at the end of 1951.

On the 1st January, 1952, the new Currency Agreement between the Governments of the Federation of Malaya, Singapore, Sarawak, North Borneo and Brunei became effective. Under this Agreement, the Malaya and British Borneo Currency Commissioners have the sole right to issue notes and coin in these five territories, and, as a backing for the currency, they manage a Currency Fund consisting of sterling securities. The Board consists of five members, two of whom are the Financial Secretaries of Singapore and the Federation of Malaya, one is appointed jointly by the Governors of Sarawak, North Borneo and the British Resident, Brunei, while the remaining two are appointed by the participating governments acting in concert. The Chairman of the Commissioners is the Financial Secretary of Singapore.

BANKING

The following banks carried on business in the Colony during the year:—

- American Express Co. Incorporated
- Ban Hin Lee Bank
- Bank of China
- Bank of East Asia
- Bank of India
- Banque de l'Indochine
- *Batu Pahat Bank
- Chartered Bank of India, Australia and China
- *Chung Khiaw Bank
- Eastern Bank
- Hongkong & Shanghai Banking Corporation
- Indian Bank
- Indian Overseas Bank
- Kwangtung Provincial Bank
- †Kwong Lee Banking Co.
- *Lee Wah Bank

*Banks incorporated in Singapore.

†This Bank is a partnership business registered in Singapore.

Mercantile Bank of India

National City Bank of New York

Nationale Handelsbank N.V.

Netherlands Trading Society

*Oversea-Chinese Banking Corporation

*Overseas Union Bank

*Sze Hai Tong Banking & Insurance Co.

*United Chinese Bank

United Commercial Bank

One new bank, the Bank of East Asia, opened a branch office for business on the 3rd June, 1952. A licence was also issued to the Bank of Canton, but it did not start operating this year. Both these banks are incorporated in Hong Kong.

In addition to banks a number of 'remittance shops' operated under permit in Singapore for the transmission of family remittances to China, particularly to areas where there are no banking facilities.

POST OFFICE SAVINGS BANK

The Singapore Post Office Savings Bank started operations as a separate entity on the 1st January, 1949. The Savings Bank which hitherto covered the whole of the Straits Settlements, was divided by transferring the Penang and Malacca divisions to the Federation of Malaya and by the severance of the Labuan division.

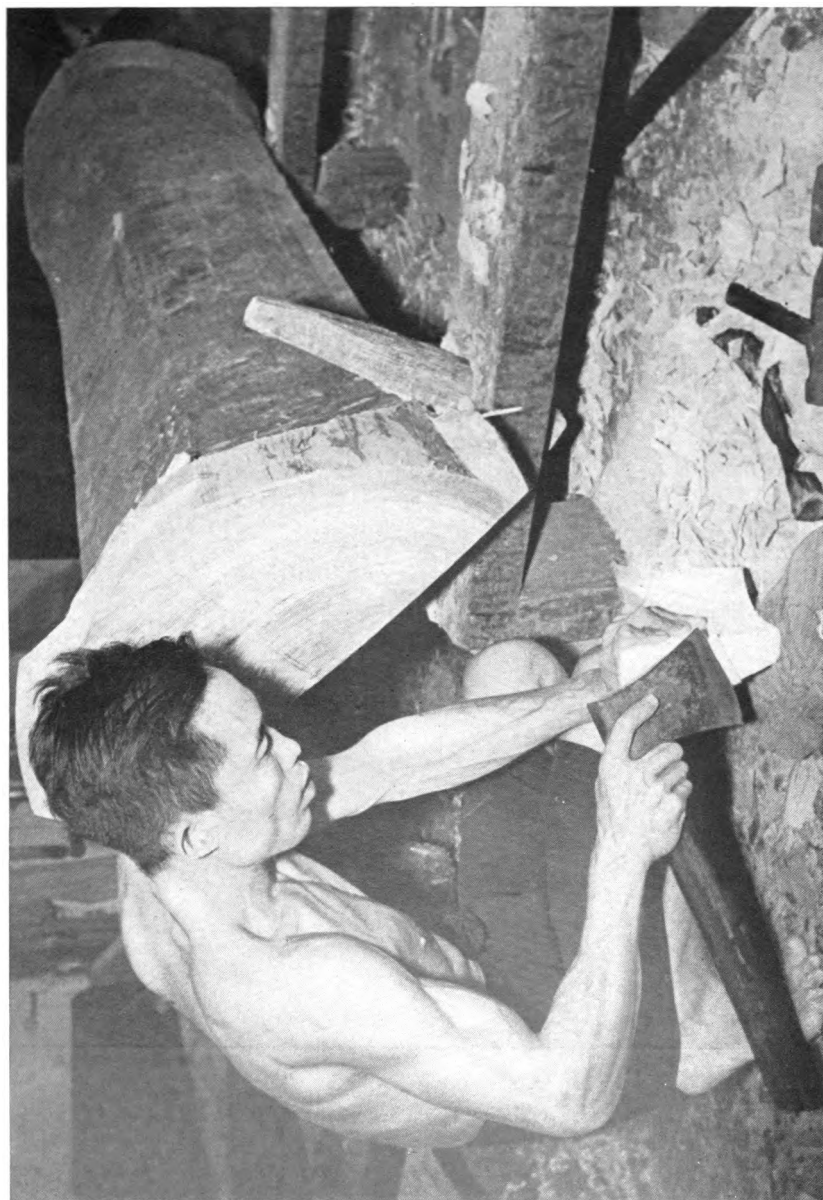
The increasing popularity of the Savings Bank among the lower income groups is evidenced by a 10 per cent increase in the number of depositors during the year. On 31st December, 1952, \$42,076,460 stood to the credit of the 114,000 depositors, an increase of \$6,724,758 over the comparative figure of \$35,351,702 at the end of 1951.

The Bank offers maximum security, with a minimum of restriction. Deposits and withdrawals can be made at any Post Office in Singapore. Up to one hundred dollars can be withdrawn on demand.

*Banks incorporated in Singapore.



Temple Flower, pastel drawing by Lu Chong Meng
(Singapore Chinese High School), aged 18 years



C. A. Gibson-Hill

A Chinese coffin maker at work. The lid of the coffin is taking shape

BANK RATES

The year began with the Malayan dollar strong against sterling and with the Malayan Exchange Banks Association's T.T. selling and T.T. buying rates for merchants at $2/4\frac{3}{32}$ and $2/4\frac{7}{32}$ respectively. Following the spectacular fall in the price of rubber, there was a gradual weakening in the Malayan dollar resulting in considerable pressure being put on banks to sell sterling. The Malayan Exchange Banks Association later lowered its rates on several occasions, the last being to $2/3\frac{15}{16}$ and $2/4\frac{1}{16}$ for banks T.T. selling and T.T. buying respectively on 12th May. These rates continued unchanged throughout the rest of the year. Similar changes took place in the rates for allied currencies.

There were frequent fluctuations in the rates for U.S. dollars following corresponding fluctuations in the London/New York rate.

The rates ruling on 31st December for the principal currencies were:—

		<i>Banks selling rate for Telegraphic transfer or on demand draft</i>	<i>Banks buying rate for Telegraphic transfer</i>
London .. ..	..	$2/3\frac{15}{16}$	$2/4\frac{1}{16}$
Australia .. ..	..	$2/10\frac{27}{32}$	$2/11\frac{7}{32}$
New York .. ..	..	$32\frac{9}{16}$	$32\frac{15}{16}$
India and Burma ..	..	$155\frac{1}{8}$	$156\frac{1}{8}$
Hong Kong .. ..	..	$53\frac{11}{16}$	$53\frac{3}{16}$



VI

Commerce

ALTHOUGH increasing attention is being paid to encouraging the development of new secondary industries to diversify the economy of Singapore, its wealth and prosperity continue to rest almost entirely on the dual assets of being the premier port of Malaya and the natural entrepot for surrounding territories in South-East Asia. This year, Singapore handled approximately 74 per cent of Malaya's direct foreign imports and 67 per cent of the total exports. The total value of imports* of merchandise for this year amounted to \$2,849 million compared with the record of \$3,594 million in 1951 and \$2,124 million in 1950. Of this decrease of \$745 million from last year's figures, some \$609 million is due to decreased imports of rubber. This naturally affected the value of merchandise exports*, which was \$2,543 million compared to \$4,016 million in 1951 and \$2,480 million in 1950. The importance of rubber is even more apparent from the figures of value of exports, since \$1,403 million of the \$1,473 million reduction in export values between 1952 and 1951 are due to decreased rubber exports. The volume and value of foreign trade in 1951, were abnormally high and therefore the reduced figures for this year were not unexpected; comparison

*Imports from and exports to the Federation of Malaya are not included in these figures.

with more normal years gives a truer perspective—1952 \$5,392 million, 1950 \$4,604 million, 1949 \$2,358 million, 1948 \$2,402 million.

Trade with Indonesia was valued at \$1,198 million and represented 22 per cent of Singapore's foreign trade. That with the United Kingdom totalled \$833 million or 15 per cent of the total. The value of exports to the U.S.A. fell from \$790 million in 1951 to \$364 million this year, and overall trade totalled only \$515 million or 10 per cent of Singapore's foreign trade. There are diagrams showing the value of the principal imports and exports as well as the total foreign trade of Singapore for the years 1950, 1951 and 1952 between pages 86 and 87.

From these figures which show that the *value* of foreign trade has fallen substantially from that of 1951, it is encouraging, and significant of Singapore's true commercial stability, to observe that the *volume* of cargo handled in the port was only slightly less than in 1951. Details of tonnages are contained in the chapter on communication; but it is worth repeating here that the daily average of cargo handled in the port of Singapore during this year was 21,500 freight tons.

IMPORT AND EXPORT CONTROL

Throughout the year, Singapore as a member of the sterling area continued to confine imports from dollar countries to those goods essential to the economic life of Malaya and unobtainable elsewhere. The increased availability of many goods from the United Kingdom made it possible to cease issuing hard currency licences for many commodities including motor vehicles, roofing felt, crown corks, rubber hose and belting and numerous chemicals.

Licences confirmed for direct dollar imports into Singapore in the second half of the year were valued at \$18 million, compared with \$26 million in the first six months. The total of \$44 million for 1952 compares with \$108 million in 1951.

Restrictions on imports from non-dollar non-sterling sources were few, the chief being on medicines and drugs, cameras, passenger cars above 1,000 c.c., clocks and watches and toys.

On 5th September, a Prohibition Order was gazetted forbidding the importation of Coronation souvenirs manufactured elsewhere than in a Commonwealth country.

Apart from the limitations on the import of certain foodstuffs mentioned in the paragraph on food procurement and restrictions on the import of gold articles, imports from sterling area countries were permitted under Open General Licence throughout the year.

Though export controls were maintained on scarce goods it was possible to relax restrictions on canned vegetables and fruits, dried fish, drugs and medicines, jute products, galvanized wire, sewing machines, refrigerators, motor vehicles and tyres.

Trade with Indonesia

In common with the overall trade trend during 1952, the volume and value of trade with Indonesia fell considerably compared with that in 1951, but, as the figures below of the main commodity groups and actual overall totals show, imports and exports were maintained above the 1950 level of trade.

<i>Exports</i>	1950 \$	1951 \$	1952 \$
Food, Drink and Tobacco	45,153,546	125,925,447	108,066,265
Textiles and Wearing			
Apparel	122,195,060	181,603,373	114,773,928
Vehicles	6,789,846	20,146,945	39,195,522
Total (all Exports) ..	229,249,504	459,138,965	401,503,290
<i>Imports</i>	1950 \$	1951 \$	1952 \$
Non-dutiable Food and			
Drink	57,625,752	47,931,942	39,201,336
Seeds and Nuts, for Oils,			
Fats, Resins, Gums ..	42,932,740	45,000,563	28,565,085
Rubber and Gutta Percha	368,230,980	905,173,703	391,871,095
Petroleum Products ..	124,420,149	180,143,136	287,973,824
Total (all Imports) ..	630,821,614	1,231,415,968	796,421,662

A fairer picture of typical entrepot trade between Singapore and Indonesia is obtained by excluding the import figures for petroleum products. Imports for the years 1950, 1951 and 1952 then read \$506,397,213, \$1,051,272,832 and \$508,447,838 respectively.

As can be seen, the value of the trade was substantially affected by the fall in the price of rubber and the consequent decrease of 128,606 tons in imports. Apart from this, commercial dealings were restricted by more stringent Indonesian import and foreign exchange regulations which imposed heavy import surcharges on many categories of goods in addition to their normal customs import duties. A *pro forma* system of import licensing necessitating physical reference of papers from Singapore to Indonesia and back to Singapore before goods could be shipped to Indonesia also led to lengthy delays which discouraged trade.

As an experiment, and in addition to the letter of credit and barter trades, the Indonesian authorities allowed rubber to be exported to Singapore on consignment, but this method was discontinued at the end of the year as it was found to be unworkable.

Trade with Japan

During the year, trade with Japan was carried on under an agreement which was signed between the United Kingdom and Japanese Governments on 31st August, 1951. This agreement provided for the settlement of all payments in sterling. A review of the agreement early this year revealed a substantial adverse balance of trade by the sterling area and, in order to adjust this, the import licensing of certain luxury and non-essential goods was stopped and in other cases restricted. Textile imports for example were restricted to 1951 levels and cement and clock imports reduced to 50 per cent of the 1951 level. No further import licences were granted for articles such as cameras, electric fans, tyres and tubes, writing and printing paper and window glass. In September, the issue of licences for the import of Japanese goods from Hong Kong was stopped.

The effect of the liberalized trade policy of 1951 is nevertheless reflected in the trade statistics for 1952 since imports against licences issued prior to the introduction of the restrictions continued to arrive in the early months of the year. The following figures show the change in the position during the second half of 1952:—

		<i>Imports to Singapore from Japan</i>	<i>Exports from Singapore to Japan</i>	<i>Balance</i>
		\$	\$	\$
January/June 1952	..	128,721,451	53,389,581	- 75,331,870
July/December 1952	..	64,778,973	49,159,955	- 15,619,018
Total 1952	..	193,500,424	102,549,536	- 90,950,888
Total 1951	..	159,820,961	108,742,133	- 51,078,828

A good proportion of these imports, of course, is subsequently re-exported; but no figures are compiled.

Rubber

Imports of foreign rubber totalled 317,792 tons this year and were less by 145,194 and 54,983 tons respectively than the 462,986 tons of 1951 and 372,775 tons of 1950. This was almost entirely due to the marked decline in imports from Indonesia already recorded.

Exports were naturally affected by this and by the slightly decreased production on Malayan estates and small-holdings. Ocean shipments from Singapore fell from 655,023 tons in 1950 and 750,229 in 1951 to 555,351 tons this year. Malayan exports of rubber to the U.S.A. were 234,248 tons, a decrease of 125,436 tons from those in 1951. Exports to the United Kingdom fell very slightly by 7,000 tons to 273,855 tons during the year. No rubber was shipped to China this year in contrast to 22,727 tons in 1951. Exports to Russia were 11,125 tons, compared to 17,497 tons in 1951.

The consequent reduction in demand affected prices for all types of rubber, which were considerably less than those for

1951. The opening price of No. 1 R.S.S. f.o.b. in January was 140 cents per lb. The price declined throughout the year to a minimum of 73½ cents per lb. in October, and thereafter rose slightly to close on 31st December at 92½ cents per lb. Other grades of rubber showed similar price trends. Approximate average prices for the year in Malayan cents compared to 1951 were:—

	1951 (Average)	1952 (Opening Price)	1952 (Average)
R.S.S. No. 1 f.o.b. . .	169½	140	96½
R.S.S. No. 2 f.o.b. . .	163½	135½	92½
R.S.S. No. 3 f.o.b. . .	156½	131½	88½
'C' Blankets f.o.b. . .	125½	105	73½

On 1st November, the Rubber Shipping and Packing Control Rules, 1952, were brought into force and all persons engaged in shipping or packing rubber for export were required to register themselves with the Pan-Malayan Rubber Export Registration Board, a corporate body composed of representatives of the rubber industry. These rules fully enforce the Rubber Shipping and Packing Control Ordinance, 1950, which was introduced as a means of removing grounds for complaint from buyers abroad regarding the quality of shipments of rubber from Malaya. This Ordinance empowers the Board to fine or suspend from operation bodies who fail to comply with the rules and standards required.

Tin

Exports of tin metal from Singapore in 1952 totalled 27,013 tons compared with 29,399 tons in 1951. The average wholesale price for tin was £963.18.6 per ton compared with £1,082.17.4 in 1951. The peak monthly average price was in February at £984.2.8 per ton and the minimum monthly average was in August at £946.19.4½. The price at the close of the year was £908.15.7 per ton. Although valued at \$44 million less than in the previous year, this year's exports realized \$10 million more than the 35,854 tons exported in 1950 which were valued at \$207 million.

Textiles

Stocks of cotton piecegoods at the beginning of the year were embarrassingly large. Imports from India during the first six months of the year were reduced to an average of 2.7 million square yards per month following export restrictions. During the latter half of the year, they increased and the year's total of imports into Singapore was 97.1 million square yards. Japanese textiles entered Singapore in considerable quantities at the beginning of the year. In February, Government suspended the issue of import licences for Japanese textiles and licensing was not resumed until October when import quotas for 1953 were fixed. The following table illustrates the imports of cotton piecegoods and main supplying countries. Figures are given in millions of square yards.

		1950	1951	1952
India .. ..	..	226.1	190.0	96.8
United Kingdom ..	..	31.3	44.1	24.5
Japan .. ..	..	42.2	55.9	47.1
Others .. ..	..	25.6	37.1	19.9
Total		325.2	327.1	188.3

The decrease in imports compared with 1951 is largely due to more cautious buying and to the presence of the very large stocks at the beginning of the year mentioned above. These stocks were drawn on and to some extent reduced during the year.

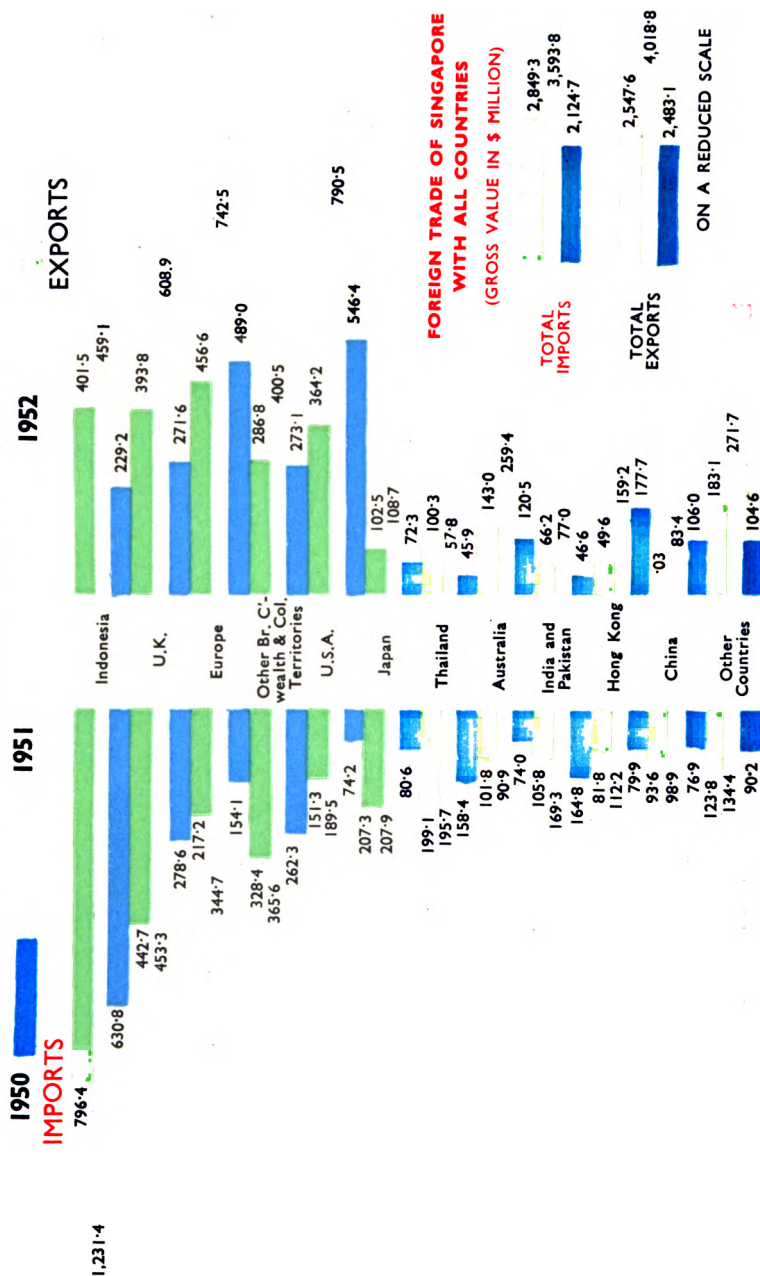
Exports totalled 134,387,724 square yards compared with 201,828,762 square yards in 1951 and 194,740,730 square yards in 1950. The chief destination was Indonesia to whom 69,838,348 square yards were exported.

Artificial silk piecegoods have steadily increased in popularity and the figures below show their increasing value to Singapore's entrepot trade. Figures are given to the nearest million square yards.

		1949	1950	1951	1952
Imports .. ..	..	31	68	114	109
Exports .. ..	..	7	24	51	69

FOREIGN TRADE OF SINGAPORE BY PRINCIPAL COUNTRIES

(GROSS VALUE IN \$ MILLION)

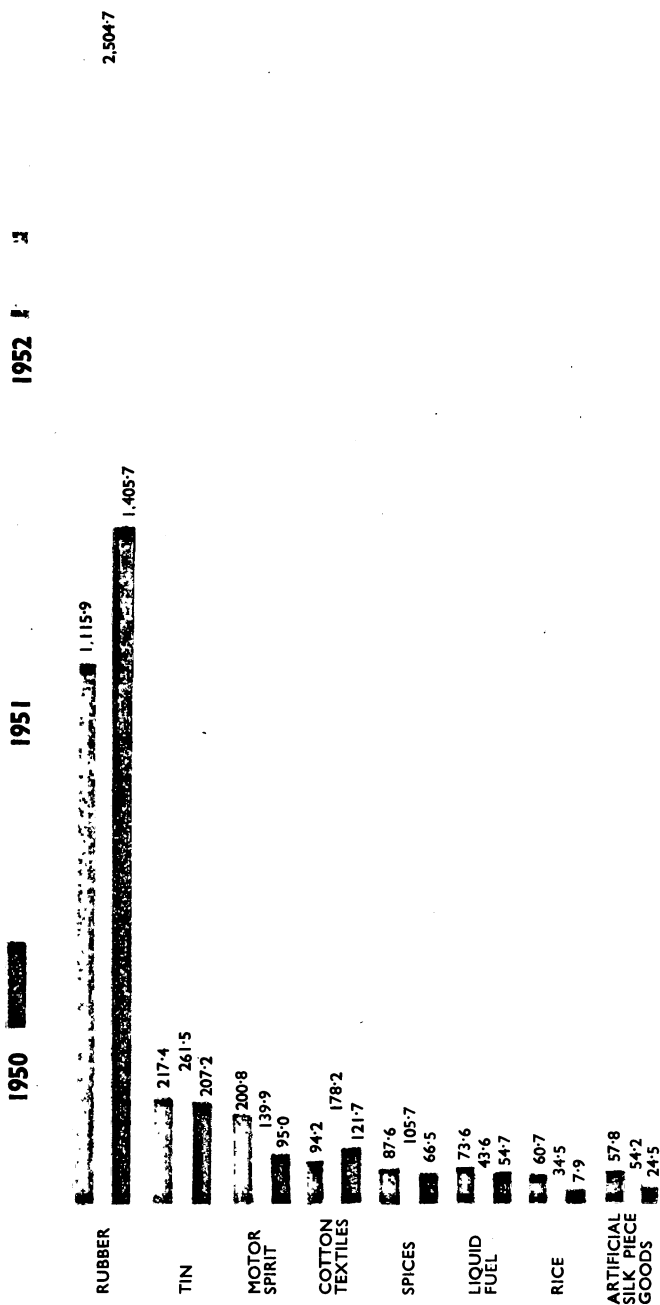


FOREIGN TRADE OF SINGAPORE
WITH ALL COUNTRIES
(GROSS VALUE IN \$ MILLION)

Note:—Trade with the Federation of Malaya is not included in this chart

PRINCIPAL OVERSEAS EXPORTS OF SINGAPORE

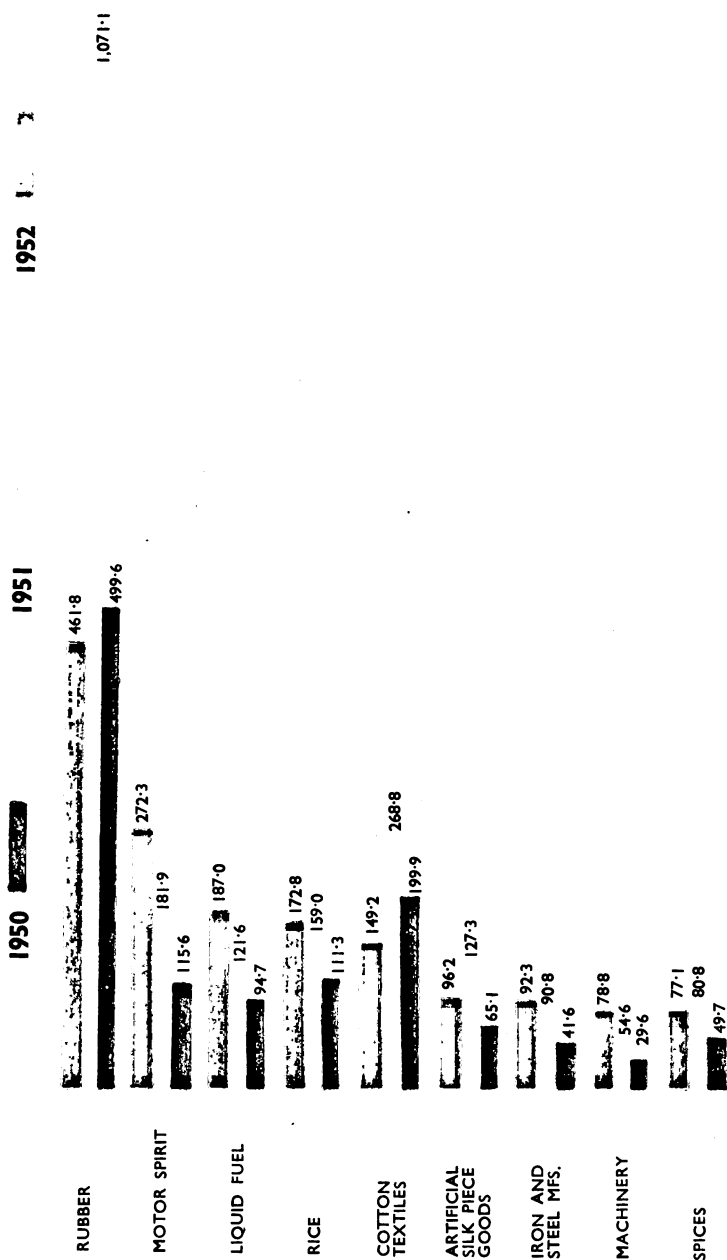
(F.O.B. VALUE IN \$ MILLION)



Note:—Exports to the Federation of Malaya are not included in these figures. Exports include Re-Exports.

PRINCIPAL OVERSEAS IMPORTS OF SINGAPORE

(C.I.F. VALUE IN \$ MILLION)





C. A. Gibson-Hill

A Cocos Islands surf boat which has just come through the only gap in the barrier reef which guards North Keeling Island

Copra and Coconut Oil

The post-war volume of trade in copra has never equalled pre-war levels and in this year there was a further reduction in imports and exports. The bulk of imports, 67,128 tons, came from Indonesia. Imports and exports were 77,187 and 46,235 tons respectively compared with 79,251 and 70,764 tons for 1951 and 102,416 and 104,981 tons in 1950. The opening wholesale prices ranged from \$36.35 per pikul in January to \$23.87 in August. The average wholesale price in December had risen to \$35.65 per pikul. In 1951, wholesale prices for copra had ranged between \$51 and \$36 per pikul and the lower prices this year enabled coconut oil manufacturers to enter new markets, notably Burma to whom exports were increased from 4,879 tons in 1951 to 12,659 tons this year. Singapore oil millers, however, faced great difficulties in purchasing copra from local importers because of the brisk competition of f.o.b. exporters to overseas countries which tended to disrupt supplies to millers. Total coconut oil exports were 23,998 tons, an increase of 6,328 tons over the 1951 figure of 17,670 tons.

Food Procurement

The bulk of the Colony's rice requirements continued to be procured on Government account. Import of certain grades, however, such as 100 per cent wholegrain, cargo, glutinous and parboiled rice was permitted commercially for domestic consumption. Sugar, similarly, continued to be imported on Government account. Because of the heavy stocks held by Government and the fact that sugar imported commercially for re-export was finding its way on to the local market, commercial imports for re-export purposes had to be suspended on 3rd June.

Licences to import the Colony's allocation of wheat flour under the International Wheat Agreement were issued to merchants who had imported flour in the previous wheat year. Because the allocation was less than the Colony's estimated requirements by about 33 per cent, it was made a condition of all licences issued for International Wheat Agreement flour that

an additional one-third of flour outside the International Wheat Agreement must be imported. It was hoped in this way that the selling price ex importers' godowns would be stabilized throughout the wheat year at an average price of \$10.15 per 50 lb. calico bag. Owing to uncertainty of supplies from Australia the re-export of wheat and wheat products from Singapore had to be suspended in July.

Building Materials

In 1952, the Colony's supply position of major building materials was sufficient to meet local demands. The control of certain building materials, which was lifted in December 1951, was not reimposed. In April, a Pan-Malayan Steel Priorities Board was set up to assess and subsequently sponsor the relative priority of Malayan steel orders placed in the United Kingdom. The Board obtained considerable releases during the year for Malaya.

Japanese and United Kingdom cement prices were lower than in 1951. At the middle of the year, as increased supplies of British cement became available, imports of the Japanese and Formosan products were restricted to a quota basis.

Stocks of other building materials, e.g. paints, sanitary ware, fittings and roofing tiles were available in ample quantities throughout the year.

Petroleum Products

Imports showed substantial increases over last year's volumes, the most outstanding being in liquid fuel and aviation spirit. The effect of this on sales of bunker fuel is reflected in an increase of more than \$32 million this year over the previous year. This, together with the increased imports, resulted in an increase of \$110 million in the value of exports this year compared to 1951. The greatest increases occurred in the exports of motor spirit where 725,000 tons valued at \$115 million were exported compared to 594,000 tons valued at \$80 million in 1951. Detailed figures are shown opposite.

IMPORTS

Commodity	Unit of Quantity	1949		1950		1951		1952	
		Quantity	Thousand Malayan \$	Quantity	Thousand Malayan \$	Quantity	Thousand Malayan \$	Quantity	Thousand Malayan \$
Aviation Spirit 100 Octane	Tons	109,073	17,796	87,388	15,927	125,999	25,042	109,361	28,072
Aviation Spirit Other Sorts	"	29,600	4,878	13,133	2,509	23,784	4,780	51,582	13,167
Gas Oil, High Speed Diesel	"	96,885	6,982	247,284	19,517	432,906	40,259	687,279	76,527
Motor Spirit	"	349,881	39,744	585,417	71,619	724,828	97,307	862,608	134,602
Liquid Fuel	"	905,452	44,628	1,114,103	47,766	1,243,503	62,469	1,768,382	117,117
Diesel Oil, other than Gas	"	764,232	54,357	649,354	46,971	681,719	59,120	666,690	69,900
Kerosene	"	106,384	9,996	147,579	14,685	116,630	13,641	228,925	32,129

EXPORTS

Commodity	Unit of Quantity	1949		1950		1951		1952	
		Quantity	Thousand Malayan \$	Quantity	Thousand Malayan \$	Quantity	Thousand Malayan \$	Quantity	Thousand Malayan \$
Aviation Spirit 100 Octane	Tons	76,446	12,707	59,944	11,249	76,880	15,413	73,666	19,514
Aviation Spirit Other Sorts	"	34,910	5,625	20,941	3,987	49,737	8,478	55,097	14,531
Gas Oil, High Speed Diesel	"	71,538	5,740	153,766	12,609	227,667	21,351	293,810	32,664
Motor Spirit	"	296,387	34,100	507,559	61,877	593,972	80,151	724,914	114,701
Liquid Fuel	"	608,129	30,850	573,974	24,138	374,385	18,393	422,770	27,254
Diesel Oil, other than Gas	"	318,199	21,319	432,730	30,596	291,380	25,243	419,191	46,371
Kerosene	"	84,148	8,023	104,936	10,602	133,646	15,522	225,507	38,965

Trade Representation

The Governments of the Federation of Malaya and Singapore maintain an office in London where trade enquiries can be made. The address of the Trade Commissioner for Malaya in the United Kingdom is 'Malaya House', 57 Trafalgar Square, London W.C.2.

International Conferences

The Colony acted as host for the F.A.O. Forestry and Forest Products Commission for Asia and the Pacific held between 1st and 13th December, 1952. Representatives attended the Eighth Plenary Session of the Economic Commission for Asia and the Far East and the Fourth Session of the Committee on Industry and Trade—both of which were held in Rangoon in January this year. Delegates from the Federation of Malaya represented Singapore also at ECAFE'S Electric Power and Statisticians Conferences held in September while the Pan-Malayan Director of Fisheries attended the South Pacific Fisheries Conference held in Fiji in May. Three representatives from Singapore attended the Ninth Meeting of the Rubber Study Group held in Ottawa, also in May. A delegate from Singapore attended the July ECAFE Working Party Meeting on Cottage Industries and Handicraft Marketing. In November/December, the Secretary for Economic Affairs, Singapore, attended the Commonwealth Economic Conference in London as the Malaya/British Borneo Group representative on the Secretary of State for the Colonies' body of advisers.



VII

Production

THIS YEAR the emphasis has been on increasing production and development in all fields. In agriculture efforts have been made to increase production of food particularly vegetables; fisheries development was pushed ahead by increased mechanization of local vessels and the extension of operations into off-shore fisheries; increased staff in the Veterinary Department have devoted attention to the production of foodstuffs of animal origin and it is satisfactory to report that the Colony can now meet its own high demands both for fresh pork and poultry although it is still dependent to a considerable degree upon imported feeding stuffs. Graded timber exports found markets in ten new countries. The establishment of new secondary industries continued steadily throughout the year and a textile factory has been set up for the first time in the history of Singapore.

LAND UTILIZATION AND TENURE

Singapore has an area of approximately 212 square miles, and a rough classification of land utilized for various purposes may be given as follows:—

		By Enumeration	By Estimation	Total
Arable land .. ..	..	—	14.3	14.3
Land for growing trees, crops	vine or			
shrubs including rubber ..	..	31.3	18.5	49.8
Permanent meadow and pasture	..	Nil	Nil	Nil
Wood or forest land .. ..	..	2.5	—	2.5
All other land .. ..	..	—	—	145.4

The island is relatively low-lying, the highest hill being Bukit Timah Hill with an elevation of 581 feet, and there are no serious problems of soil erosion. The preservation of forests and some 8,000 acres of land used as a water catchment area is provided for by the Nature Reserves Ordinance No. 15 of 1951. The utilization of land for various other purposes is subject to the control of the Singapore Improvement Trust which has planning powers over the whole island under the Singapore Improvement Ordinance. The City Council and the Rural Board also have zoning powers.

The uncertain tenure of the East India Company precluded the issue of permanent titles for several years after the founding of Singapore in 1819. From 1826, however, leases were granted for a period of 999 years, but in 1838 leases for terms up to 99 years were substituted as a common title for land within the narrow limits of the town. Land in the country was also obtainable on short term leases as laid down by Indian Act XVI of 1839 but these were considered insufficiently secure to encourage proper cultivation and from 1845 onwards, grants in freehold were made for such land. Insufficient allowance was made for the town's expansion, and many areas now in the most crowded parts of the city are held under these freehold titles which were originally intended for purely agricultural land.

Singapore was transferred to the control of the Colonial Office in 1867, and the titles for land, both in town and country, were thereafter mainly leases for terms of 99 or 999 years. In 1886, an Ordinance, the Crown Lands Ordinance, introduced a statutory form of title—the present statutory land grant, which is a grant in perpetuity, subject to a quit rent and subject also to various conditions and covenants which are implied by virtue of the Ordinance. This statutory grant became, and until recently was, the usual form of title issued. The present policy, however, is to restrict the issue of grants in perpetuity, substituting as far as possible leases for terms not exceeding 99 years. The issue of grants in fee simple is restricted to special cases.

The premium payable for the alienation of Crown land varies with the situation. Since 1947, the practice in most cases has been to charge an annual rental based on 4.08 per cent of the freehold value instead of taking a premium for the land.

In recent years, with increasing development in all areas of the island and a great rise in land values, there has been a tendency for the small fruit and vegetable growers to be crowded out of the island. As a counter measure, the Government has freely issued permits for the temporary occupation of Crown land, which are renewable annually. This has had a marked effect in keeping the small cultivators on the land. Consideration is being given to the issue of short term titles of 30 years in order to encourage greater improvements.

The main laws affecting landowners are:—

- (a) the Crown Lands Ordinance, which has been mentioned above, providing for the issue of Crown titles;
- (b) the Boundaries and Survey Maps Ordinance, which provides for the proper demarcation of holdings and emplacement of boundary marks and for the preparation and publication of maps to show these holdings;
- (c) the Conveyancing and Law of Property Ordinance, which introduces the English system of conveyancing with modifications;
- (d) the Registration of Deeds Ordinance, which provides for an optional system of registration but which by conferring priority on registered documents has made registration in practice essential;
- (e) the Singapore Improvement Ordinance, and the Municipal Ordinance, which control the use of land and the erection of buildings.

There are no restrictions in regard to ownership of land by aliens or non-aliens, indigenous or non-indigenous inhabitants.

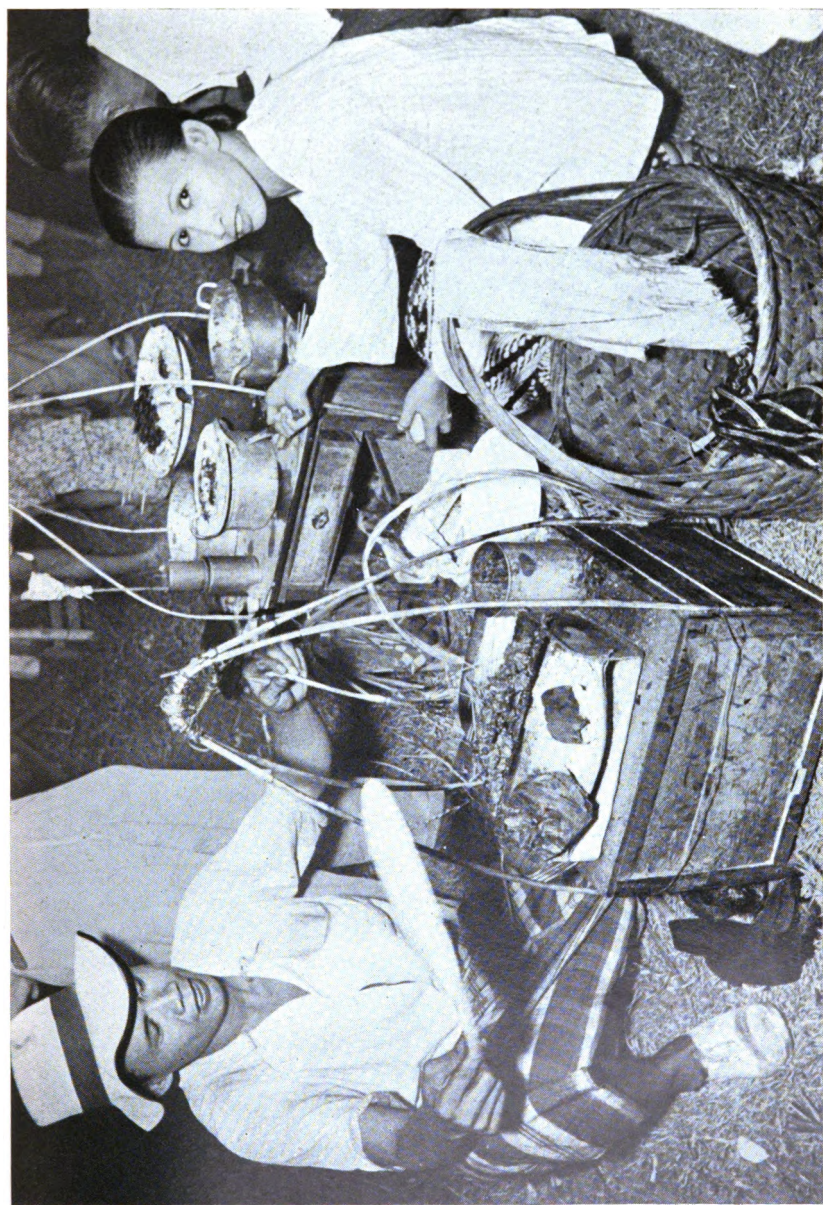
There is, however, a Malay settlement at Jalan Eunos of some 100 acres of Crown land, which is reserved for letting out to Malays only on Temporary Occupation Licences and subject to certain regulations prescribed in the Occupation of Land (Malay Settlement Jalan Eunos) Rules.

In view of the small area of the island, and a population which is now over a million and continually increasing, it is necessary that plans should be made for the better use of the available land resources. It is hoped that by proper drainage and irrigation many of the swampy areas of the island will be turned into settlement or food production areas. A start has been made with some 330 acres in the Bedok area on which will be settled persons evicted by the construction of Paya Lebar Airport. A further 1,092 acres in the same area are being acquired for food production and should be available in 1953 for re-alienation on long lease to farmers.

The needs of industry and commerce are being considered by the provision of ring roads, the construction of Shenton Way and a projected esplanade road. The bridging of Rochore River and the reclamation of the Kallang Basin are also being investigated in order to provide additional industrial and factory sites and godowns. An improvement in the amenities of the island is envisaged by the planning of public parks at Bukit Batok and Pasir Panjang and sea-side bathing facilities for the general public at Changi, Bedok and Pasir Ris.

AGRICULTURE

Owing to increasing urbanization of Singapore and the limited area of the island, the expansion of perennial crops such as rubber, coconuts and pineapples has almost ceased for many years. The present areas under vegetables and foodcrops, entirely in the hands of Chinese growers, have been increased at the expense of the rubber and coconut areas felled during the occupation and recent years.



C. A. Gibson-Hill

Javanese satay seller. Satay are pieces of braised meat on sticks costing 10 cents a stick



C. A. Gibson-Hill

Buying vegetables at the street market is a serious business. The woman is holding a daching—Chinese scales

The main crops in addition to vegetables and food-crops are rubber, coconuts, pineapples and tobacco. Other minor crops, such as pepper, sيره, arecanuts, bananas and miscellaneous fruits are cultivated.

The acreage, at the end of the year of the important crops mentioned above is shown in the table below. Production figures are given whenever known and are for the calendar year 1952 :—

<i>Crops</i>	<i>Acreage</i>	<i>Production</i>
Rubber	19,814	1,116 tons
Coconut	7,800	—
Vegetables and food-crops (including sweet potato and tapioca)	6,950	25,800 tons
Miscellaneous fruits	3,800	—
Banana	750	—
Tobacco	243	286 tons
Pineapples	280	—
Pepper	15	3 piculs
Derris	25	—

The rubber produced by small-holdings is mainly unsmoked sheet whereas estate production is usually a very good grade of ribbed smoked sheet. During the year, the general fall in the price of rubber led to a reduced interest in this crop among the small-holders. The price of unsmoked sheet dropped from an average of \$167 per picul in January to \$105 in December.

The main coconut areas are situated at Changi and Ponggol. Most of the trees are bearing poorly, the yield being less than 2,000 fruits per acre per annum. Copra curing is not carried on in the holdings, but is a separate industry conducted by middlemen, who undertake to husk the nuts and operate curing kilns. Seven curing kilns were in operation during the year. Approximately 150 acres have been lost at Changi through clearing to make way for housing schemes. Prices fell slightly over the year from \$120 per 1,000 nuts in January to \$110 per thousand in December.

The total acreage under pineapple cultivation fell from 530 acres in 1951 to 250 acres this year. It is likely to fall further in future years.

In Johore, the cultivation of pineapples is confined to the peat soils of the West coast, where it is hoped that it will prove to be a permanent crop. When pineapples are grown on upland soils such as in Singapore, the method of cultivation causes soil erosion and loss of fertility to such an extent that it reduces the yield of fruits to a point where after five years it is no longer economic to continue cultivation.

The Singapore pineapple canneries have their own plantations in Johore and local production is mainly sold for consumption as fresh fruit. The three Singapore canneries packed 239,071 cases of tinned pineapples during the year, 10,144 more cases than in 1951.

There are eight licensed tobacco manufacturers three Indian and five Chinese. They produce cheap cheroots and Chinese red cut tobacco by blending locally grown leaf with leaf imported from China and India. Attempts to produce cigarettes of a fairly good blend with imported Rhodesian leaf have been made by two Chinese manufacturers. The high prices during the earlier part of the year led to increased tobacco production; 543 acres were harvested compared with 416 acres in 1951. As a result, production of air dried leaves increased from 171 tons in 1951 to 286 tons this year. Prices at the beginning of the year averaged \$270 per picul, rose to \$315 by mid-year and finally receded to \$150 at the end of the year.

The quantity of fresh vegetables produced rose slightly from 24,145 tons last year to 25,800 tons despite the removal of farmers from the Paya Lebar area where the new International Airport is under construction. The supply of locally grown vegetables is insufficient to meet the demand and approximately 29,144 tons of additional vegetables were imported during the year.

The following are the most important vegetables grown locally:—

Leaf Vegetables:

Chye Sim, Peh Chye, Bayam, Kang Kong, Celery, Chinese Chives, Spring Onions, Chinese Kale.

Salads and Fruit Vegetables:

Lettuce, Cucumber, Bitter Cucumber, Brinjals, Chillies, Ladies' Fingers.

Gourds:

Angled Loofah, Bottle Gourd.

Peas and Beans:

Cowpea, French Beans.

Tuberous Vegetables:

Sweet Potato, Tapioca, Sengkuang.

Because of unsuitable climatic conditions, temperate vegetables cannot be grown in Singapore and Round Cabbage, Long Cabbage (Wong Nghah Pak), Leeks, Beetroot, Tang Oh, Lotus Rhizomes, Water Chestnut, Green Peas, Lettuce and Cauliflower have to be imported.

Supplies of vegetable seeds come almost entirely from China and during the year over 60 tons were imported.

The table below indicates the retail prices of the main types of fresh vegetables sold this year:—

				January	December
				1952	1952
				\$ c.	\$ c.
LOCAL VEGETABLES PRICES PER KATI					
Chye Sim	..	..	..	52	35
Peh Chye	..	..	..	58	40
Twa Chye	..	..	..	—	—
Bayam	..	..	..	30	25
Kang Kong	..	..	..	25	22
Chinese Celery	..	..	..	1 50	90
Chinese Chives	..	..	..	59	57
Spring Onions	..	..	..	1 83	56
Chinese Kale	..	..	..	1 43	84
Chikor Manis	..	..	..	25	—

	January*	December
	1952	1952
	\$ c.	\$ c.
Lettuce ..	98	72
Cucumber ..	49	29
Bitter Cucumber ..	84	70
Brinjals, purple ..	36	26
Brinjals, green ..	42	31
Chillies, green ..	1 05	52
Chillies, red ..	1 71	1 02
Bottle Gourd ..	25	25
Snake Gourd ..	20	25
Angled Loofah ..	50	40
Smooth Loofah ..	—	—
Cowpea ..	57	39
French Beans ..	1 35	80
Ladies' Fingers ..	66	70
Sweet Potato ..	20	20
Tapioca ..	07	07
Keladi ..	41	22
Sengkuang ..	25	22
Bamboo Shoots ..	26	30
IMPORTED VEGETABLES PRICES PER KATI		
Round Cabbage ..	66	35
Long Cabbage ..	60	50
Leeks ..	—	54

Steps taken during the year to increase future supplies of vegetables by land acquisition have already been recorded under land utilization above.

The area under mixed vegetables, sweet potatoes and tapioca increased from 6,770 acres to 6,950 acres. Towards the end of the year, officers of the Agricultural Department carried out a survey of vegetable marketing, transport and collection arrangements and the data collected is to be utilized in a general report on markets and marketing. The survey revealed that about 66 tons of vegetables were moved each day from the rural area to the City area.

The Agricultural Department's plant fumigatorium, situated at South Quay, was in operation throughout the year. It is capable of fumigating up to 3 tons of produce at each operation.

A check over the importation of prohibited plants by sea and air was maintained constantly by frequent inspections made in co-operation with the Customs Department. Because of the increasing entry of plants by air, a special officer will be stationed at the airport in the near future.

The revenue obtained from the inspection service was \$3,426.80, an increase of \$1,576.80 over 1951.

The Agricultural Department is administered by an agricultural officer, who is also an officer of the Botanic Gardens Department, and three agricultural assistants. This staff is mainly responsible for giving technical advice to farmers and the collection of agricultural statistics and data. The Department also maintains strict control over importation of plants under the Plant Importation Rules of 1936.

ANIMAL HUSBANDRY

In previous years the responsibilities of the Veterinary Department have been largely confined to maintaining animal health in the Colony. This year, as part of the Government's campaign for increased food production, special attention has been turned to animal production and an Animal Husbandry Branch of the Department was formed in November. The new establishment of the Government Veterinary Department comprises: the Chief Veterinary Officer; the Animal Husbandry Officer; a Deputy Veterinary Officer; four Assistant Veterinary Officers (one attached to the Animal Husbandry Branch); and eleven Veterinary Assistants (two attached to the Animal Husbandry Branch).

Animal health and production were not affected seriously by any disease epizootic this year. A localized outbreak of anthrax in a herd of imported milch cattle occurred in June and two animals died. The area was strictly isolated and all affected

cattle were vaccinated against the disease. No further case was reported affecting local livestock. This outbreak occasioned some economic loss to hide exporters as the Colony could not be certified free from enzootic disease.

Ranikhet disease, endemic in Colony poultry, caused high mortality in flocks not immunized by vaccination. Over a million birds were protected against this disease during the year, but for various reasons, large numbers remain unvaccinated and susceptible.

In animal production also considerable economic loss resulted from chronic infestations and infections, more particularly in pigs and poultry. This loss was due basically to bad animal management and the use of inferior breeding stock.

The Colony is dependent in large measure for its fresh meat supplies on imported livestock other than swine. An outbreak of serious animal disease on the island would dislocate trade. To avert such an emergency and to prevent the entry of diseases transmissible to man, such as rabies, imported livestock on arrival undergo stringent detention in the Colony Veterinary Quarantine Station. During the year 50,859 animals were quarantined. No disease epizootic was intercepted during the year. Chief mortality occurred in emaciated animals which arrived in the last stages of general debility.

The year's census of Colony livestock showed an increase in all classes of animals other than goats.

		Oxen	Buffaloes	Goats	Swine	Poultry	Horses
1952	..	.. 4,219	489	1,321	212,830	3,500,000*	37

The number of livestock imported into Singapore for slaughter decreased during the year and there was increased slaughter of locally produced animals. The market price of meat and eggs remained high although prices tended to fall a little towards the end of the year. A main reason for the continuing high prices was the dearness of animal feedstuffs which together with the

*Estimated figures.

lack of an organized policy of animal husbandry and rural economy amongst the small-holders prevented greater expansion of the livestock industry in the Colony. It was to tackle these and similar problems that the Animal Husbandry Branch mentioned above was brought into being.

During the year 320,076 pigs were slaughtered in Singapore; 301,763 were produced within the Colony by Chinese small-holders; 11,048 were imported from Indonesia and 7,238 were imported from the Federation of Malaya. From August onwards increased pig production enabled the Colony to export 1,500 local pigs each month to the Federation. This was a further encouragement to the small-holder producers.

Frozen carcasses imported from Australia constitute another source of pork supply to the Colony, but so far the local Chinese population is not accustomed to frozen food.

Population resettlement in the Federation of Malaya resulted in a decreased pig population and a consequent increase in the market price of pork. Because prices are cheaper now in the Colony, there is a brisk demand for Singapore pigs which the Federation buyers also prefer to the coarser Indonesian pigs that do not dress out so well. The Federation pig industry is however rapidly recovering and the demand for Singapore pigs is unlikely to be permanent. After demands for home consumption are fulfilled a good market remains in British North Borneo and Sarawak for any Singapore surplus.

The poultry industry in the Colony continued to expand and there are now a number of farms with over 5,000 head of birds. Large numbers of eggs and chickens are produced and a surplus is exported to the Federation where a temporary deficiency exists following squatter resettlement. This development over the last few years has been made possible by the introduction of anti-Ranikhet vaccine produced at the Veterinary Research Laboratories in Ipoh in the Federation of Malaya. Chickens are normally vaccinated when they leave the brooders at six to eight weeks old and the resulting immunity is of several

years duration. During the year 1,362,313 birds were vaccinated by the Veterinary Department.

There was a decrease in the number of cattle slaughtered for beef consumption. Of the total slaughtered 82 per cent were imported into the Colony, chiefly from Bali and the neighbouring Indonesian Islands.

Year	Ox Slaughter	Buffalo Slaughter	Local Production Per cent	Market Cost Per kati
				\$ c.
1951	3,837	2,440	9	2 21
1952	3,436	1,854	18	2 40

The original purchase price of Balinese cattle in 1948 was 45 cents per lb. At the close of this year the purchase price had risen to 55 cents per lb. The increase in export price of Indonesian cattle coupled with the existing shortage of beef cattle in the Federation is viewed, therefore, with concern. In addition to imports of cattle on the hoof the deficiency is made good to some extent by the importing of frozen carcasses from Australia. The chief hope for the future appears to centre on the development of a beef industry in the Federation.

Local production of goats is limited. The deficiency was made good in pre-war days by importation from the Federation. But the Federation has now few surplus goats for export as the goat population was severely depleted during the Japanese occupation.

It is customary to meet the deficiency of goats in Singapore by the importation of live Australian sheep the quality of which has often been very poor. In all 57,743 Australian sheep were slaughtered for mutton in Singapore during this year and sold in the market at \$1.40 per lb.; 2,287 goats were slaughtered and marketed at \$2.15 per lb. The majority of these goats was imported from Indonesia.

If the demand exists the goat import trade can be considerably expanded in the near future when adequate animal quarantine space becomes available on completion of the Henderson Road Quarantine Station.

There are in the Colony only 3,172 milch cows and 369 milch buffaloes. Most of these animals are owned by Indians who traditionally drink fresh milk; this milk is retailed at 40 cents per bottle and adulteration is common. There is also a herd of imported Australian dairy cattle maintained for commercial milk and cream production. This milk is pasteurized and bottled under hygienic conditions. Fresh milk production is a very minor industry and lack of adequate grazing prevents further expansion. The deficiency is met by the consumption of tinned and powdered milk.

The average lactation of the indigenous zebu cows in the Colony does not exceed 1,000 lb.

FORESTRY

With the exception of some very small areas of Crown forest and City catchment areas which, through protection by reservation, still contain some of the original flora, the original forest on Singapore Island has long since been destroyed and only small patches of non-productive secondary forest remain. For practical purposes no timber or other forest produce is produced from the forests on the island; in spite of this, Singapore is a major market for such forest products as timber, rotans, damar and gums; the raw material is all imported from the mainland and surrounding territories and is processed in Singapore for local consumption and for export.

The most important of these processing industries is the production of sawn timber. There are twenty-one major sawmills and some ten or more minor ones, some of which only work sporadically. All the mills are owned by Chinese and operated with Chinese labour. Their output varies from about sixty tons of sawn timber a day to less than two tons. There is also one large modern plywood factory which was opened in 1951; this operated throughout the year and besides supplying large quantities of plywood locally and to the Federation, exported plywood to thirteen different countries including the U.S.A. It is owned

by a European company and is operated with mixed Chinese, Malay and other labour.

In contrast to the difficult supply position in 1951 there was practically no shortage of logs in the mills this year. This was partly due to a reduced demand for sawn timber referred to below, but there has been a regular flow of logs from Indonesia since the barter trade problems were resolved at the end of 1951. Log supplies from the Federation of Malaya, chiefly from Johore, were also fairly regular though security measures taken against the Communist terrorists had some effect on supplies and added to log costs.

For the period January to August the demand for sawn timber for both local consumption and for export was limited, and stocks accumulated rapidly in some mills; to prevent over-production, therefore, a number of mills worked only part-time during that period, or closed down some of their sawbenches. In September, the demand increased, particularly from overseas, and was maintained for the rest of the year; exports of sawn timber during the last quarter of the year were over double those of any previous quarter. Total production of sawn timber in local mills was about 180,300 tons; in addition 38,861 tons were imported. Most of this came from the Federation and some of it was re-exported overseas. A total of about 219,161 tons of sawn timber was therefore handled in Singapore during the year.

Except in special circumstances, the export of the primary hardwoods, of *kapur*, and of round logs was prohibited as in previous years, as supplies were inadequate for local requirements. The quantitative control on the export of other kinds of timber which was introduced in 1951 was relaxed.

The grading of sawn timber under the Malayan Grading Rules (Export) was continued throughout the year, and although the quantity of graded timber exported was considerably less than in 1951, a feature of the market was the increase in the number of purchasing countries which rose from six in 1951 to seventeen

this year. As in previous years, a high proportion of the grading was carried out by certificated employees of the exporters and sawmills. This system of private grading, which is subject to a percentage check by Government graders, has been thoroughly tested and has proved entirely successful.

Comparative figures, compiled by the Forest Office, Singapore, from quantities measured at the time of grading, for exports of timber graded in Singapore for the past three years, in tons of fifty cubic feet, are given below. The principal timbers exported are Keruing (*Dipterocarpus spp.*), Kempas (*Koompassia malaccensis*), Puhah (*Tetramerista glabra*), Meranti (soft *Shorea spp.*), Bintangor (*Calophyllum spp.*), Geronggang (*Cratoxylon spp.*), Melawis (*Gonystylus spp.*), Mengkulang (*Tarrietia spp.*), Mersawa (*Anisoptera spp.*), Nyatoh (various species of *Sapotaceae*), and Sepetir (*Sindora spp.*).

Exported to		1950	1951	1952
United Kingdom	..	18,114	18,804	14,271
Australia	..	5,219	13,678	2,888
New Zealand	..	—	42	649
South Africa	..	492	230	500
United States of America	..	1	—	—
Holland	..	249	319	223
Hong Kong	..	24	43	26
Denmark	..	20	—	33
Egypt	..	—	—	1,665
Mauritius	..	—	—	495
Rhodesia	..	—	—	57
Norway	..	—	—	56
Iraq	..	—	—	32
Belgium	..	—	—	52
Sudan	..	—	—	50
Malta	..	—	—	10
South Korea	..	—	—	343
Aden	..	—	—	282
Total		24,119	33,116	21,632

The very marked drop in exports to Australia is due to the drastic import restrictions imposed by that country at the beginning of the year. The timber exported to both Egypt and South Korea was for the British military forces in those countries. Total exports from Singapore of timber graded both in Singapore and Federation of Malaya and of ungraded timber totalled 57,856 tons compared with 64,369 tons last year.

An outstanding event of this year was the holding of the Second Session, of the F.A.O. Asia-Pacific Forestry Commission in Singapore. This Conference was opened by the Governor on 1st December and delegates from fifteen countries attended. The delegates visited the Federation of Malaya from 5th to 8th December before returning to Singapore. The Conference closed on 13th December.

At the end of the year the Forest Department staff consisted of one Senior Assistant Conservator of Forests, one special grade and four other Timber Inspectors. The Department is largely concerned with the grading of timber for export, and revenue, all derived from grading fees, amounted to \$34,263; expenditure was \$54,821.

FISHERIES

The fishing industry of the Colony falls into two well-defined groups—the individual fishermen operating small boats from the villages around the coast of the Colony and the wholesale dealers who are the owners and operators of the powered boats based on the town area. The latter, who are in reality fishing companies, also act as market agents for the smaller fishermen whom they sometimes finance. There is, however, little indebtedness amongst the individual fishermen and an alternative source of capital for the extension of their fishing operations is now available from the Fisheries Loans Fund.

The powered fleet, which is based on the City area, is usually operated on a share of the catch basis, the share being in proportion to the productivity of the method and the experience

of the fishermen. In the case of the *Moro-ami* units the share may be as great as 33 to 50 per cent of the total catch but in other cases a small monthly salary may be paid to which is added a bonus based on the profits of each trip. The fishermen employed on *kelongs* (fish traps) are paid a fixed monthly salary but they have, in addition, a number of valuable privileges.

The main fisheries adjacent to the Colony are seasonal and there is evidence that the resident fish population is small. An important *Scomberomorus* and *Chirocentrus* fishery occurs in the Durian Straits and in the waters adjacent to the Colony. The basic fishery is that for the whitebait (*Stolephorus spp.*), which is harvested by the numerous fishing stakes around the Colony. Skipjack (*Euthynus*) fisheries in the South China Sea and the Indian Ocean are fished by Singapore vessels and a limited number of *Moro-ami* (drive-in net) units operate off coral reefs on the east coast of Malaya and off the coast of Cambodia. The closure of the grounds in Indonesia has led to the decay of this section of the industry.

There are 300 acres of carp ponds in the Colony besides a number of brackish water prawn fisheries. It is estimated that nearly 900 acres of cleared mangrove swamp are utilized for prawn pond culture and yield over 200 tons of prawns each year.

Fishing methods employed in the Colony are numerous and varied. In the in-shore fisheries, palisade traps (*kelong*) are the most productive fishing gear, but other important methods are beach seines, drift-nets, and fish-pots. Many primitive methods of interest to the anthropologist can still be seen in Colony waters. These include the use of spears and loop-fishing.

The main methods employed in the off-shore fisheries are pair-trawling, long-lining, trolling and drift-netting. Pair-trawling was introduced into the Colony in January by the transfer of a unit from Hong Kong. It has been of limited success although units have achieved catches of two tons per day's

absence from port. Long-lining and trolling are not new methods. Drift-netting is practised in local waters, but its extension into grounds off the coast of Borneo is a new development.

The number of fishermen employed in the fishing industry rose from 5,072 to 5,762 which includes 4,204 Chinese and 1,553 Malays. The number of licensed fishing boats rose markedly during the year particularly vessels using outboard engines which increased from 80 to 377 largely through the provision of loans and the supply of engines by the Fisheries Loans Board and the Fisheries Department. Inboard propelled fishing boats also increased from 174 to 205. Seven of the vessels which were transferred from Hong Kong are large enough to operate in the South China Sea during the adverse North-East monsoon. The total number of non-powered fishing boats rose from 1,933 to 2,047. This increase includes the establishment of an off-shore drift-net fleet consisting of 15 half-decked sailing boats over 30 feet in length. The vessels are attached to mother ships for purposes of supply and for marketing their catches.

The unsatisfied local demand for fresh fish ensures that all catches are marketed without processing, though whitebait is normally boiled immediately after capture. Only in times of glut are any fish processed.

Production by Singapore licensed fishing boats and gears is estimated by means of a sampling system in respect of operation in local waters and by total enumeration of the catches landed from the off-shore fisheries. The following table (in tons) illustrates the increase in production which has occurred during the past three years:—

Source	1950 Tons	1951 Tons	1952 Tons
Near-water grounds ..	3,481.07	3,600.72	3,428.21
Off-shore grounds ..	Nil.	535.27	2,085.12
Total ..	3,481.07	4,135.99	5,513.33

This does not include carp produced in the fresh water ponds in the Colony which are estimated to yield approximately 200 tons of fish per annum. It also excludes catches of manure fish which have fallen from 2,627.4 tons in 1950 to 1,462.4 tons this year. This fall is attributable to the intensity of fishing in Colony waters combined with the comparative failure of the migrant fisheries.

The remarkable increase in production is entirely due to the development of the off-shore fisheries. The most important methods employed were pair-trawling, long-lining and trolling which provided 10.4, 8.3 and 6.1 per cent of the total catches made by Singapore operators.

The following table (in tons), which is compiled from data supplied from a number of sources, illustrates these increases:—

TOTAL AVAILABILITY			
Source	1950	1951	1952
A. Local Production*	3,481.07	4,135.99	5,513.33
B. Imports:			
(1) Republic of Indonesia	2,699.99	2,418.07	2,563.34
(2) Federation of Malaya ..	11,568.99	12,911.90	13,597.76
(3) Other Territories ..	299.76	251.72	476.30
Total ..	18,049.81	19,717.68	22,150.73
Less Exports ..	633.69	1,240.65	1,477.96
Real Availability	17,416.12	18,477.03	20,672.77

Imports from Johore are steadily falling, but the deficiency is being met from increased production by local vessels. The decreased production on the West and South coasts of Johore in particular is however being offset by a general increase in imports from the Federation of Malaya.

*Excluding manure fish.

Trade in other marine produce continues to be an important feature of the entrepot trade of the Colony. The trade in salt dried fish is rapidly approaching its pre-war volume in spite of Indonesian currency regulations which restrict exports to that market. The following table illustrates the importance of this trade:—

	1950		1951		1952	
	Weight (In Tons)	Value \$	Weight (In Tons)	Value \$	Weight (In Tons)	Value \$
Imports..	23,188.56	17,700,438	41,948.21	31,291,405	49,565.50	34,325,384
Exports..	21,730.53	15,389,129	36,614.04	38,302,294	46,147.57	44,994,151

Other important marine products are beche-de-mer, blachan, seaweed, fish maws, sharks' fins, green snail and trocus shells and canned fish of various types. Imports of these commodities amounted to 8,735.91 tons valued at \$16,025,509 and exports to 9,342.62 tons valued at \$13,198,860.

There are six manufacturers in the Colony with plants capable of producing nearly 400 tons of ice per day. Cold storage facilities are also extensive and can accommodate nearly 8,000 tons (1 ton=100 cubic feet) of various perishable commodities. This includes meat, vegetables and fruit storage and the space devoted to storage of fish cannot be accurately assessed. There is however a serious shortage of short-term storage plants for fresh fish as a result of which heavy landings by trawler and long-line units have at times depressed the wholesale market prices to a level at which production was barely economical. These plants are all operated by private companies.

There are five major auction markets in Singapore, two of which are controlled by the City Council and the remainder by private individuals. The retail trade is financed almost entirely by the wholesalers who do therefore undertake the major risks of the fishing industry. A comparative table showing the prices of selected types of fresh fish for the years 1951 and 1952 is shown on the opposite page.

ANNUAL AVERAGE DAILY PRICES OF FRESH FISH
(per katty)

<i>Type of Fish</i>	1951		1952	
	<i>Wholesale</i>	<i>Retail</i>	<i>Wholesale</i>	<i>Retail</i>
	\$ c.	\$ c.	\$ c.	\$ c.
Bawal puteh ..	2 04	2 81	2 32	3 30
Bawal hitam ..	1 52	1 77	1 60	1 80
Kurau ..	1 69	2 67	2 01	2 94
Senangin ..	1 65	1 85	1 60	1 84
Tenggiri ..	1 47	1 78	1 56	1 72
Belanak ..	1 06	1 61	1 29	1 59
Merah ..	99	1 72	1 01	1 46
Chencharu ..	79	94	71	89
Talang ..	39	66	45	59
Parang-Parang ..	1 31	1 64	1 36	1 56
Terubok ..	99	1 12	1 03	1 21
Yu ..	42	62	45	59
Pari ..	43	51	35	48
Prawns (large) ..	1 92	2 99	2 83	3 46
Gelama ..	44	62	44	59
Bilis ..	40	70	48	72
Kembong ..	74	1 10	87	1 12
Selar ..	1 03	1 59	1 29	1 53
Tamban ..	37	49	36	51
Ikan buat baja ..	24	29	20	26

Investigations have shown that local fishermen rarely received less than 60 per cent of the retail value of their catches.

The Fisheries Department is administered by the Deputy Director of Fisheries, Singapore, under the guidance of the Director of Fisheries, Federation of Malaya and Colony of Singapore. This year the Department included the following sections:— Administrative (8), Statistics and Shipping (6), Inspectorate (12), Production (12) and the Fisheries Depot (5). (The figures in brackets denote the staff employed and do not include vacancies).

Revenue amounted to \$89,024.09 during this year. This figure includes repayment of loans and the operation of a suspense

account for the supply of fishing materials to fishermen. Fisheries revenue, excluding such items, was \$17,380.02 and actual expenditure on non-recoverable items was \$175,390.85.

It is the Government's policy to encourage increased production through the existing fishing industry whenever possible by the introduction of improved techniques, new methods and materials and the application of scientific research to the fisheries, and to raise the standard of living of the local fishermen and assist them to meet the changing conditions within the industry.

The mechanization of local sailing vessels and the extension of operations into the off-shore fisheries were the most noteworthy advances made during the year. Apart from this there were more fishermen, boats and fishing gear employed in the industry during the year. Unfortunately catches were below average and operations were restricted by rough weather conditions particularly towards the end of the year. The introduction of trawlers from Hong Kong was of great significance, apart from the immediate addition which they made to local landings in that they demonstrated the value of larger vessels and the practicability of introducing new fishing methods.

To enable fishermen to purchase equipment with which to extend their operations into the open sea a Fisheries Loans Fund of \$250,000 was established in 1951. This provided assistance and encouragement for much of the development which occurred during the year in the off-shore fisheries. In particular, loans were approved for the establishment of an off-shore drift-net unit, for the construction of two new and powerful trawlers, for the mechanization of small vessels and for long-line and purse-seine operations. Most of the projects came into operation during the year and the success of this fund has resulted in its extension by the provision of a further \$150,000.

The supply to fishermen of new and improved materials for the construction of their gear and boats and for the bulk purchase of scarce materials was continued during the year. Outboard

engines, ready-made cotton nets to local specifications, nylon netting, more powerful kerosene lamps and a variety of other articles were sold to fishermen. The most successful introduction was undoubtedly the nylon netting which was found to be extremely effective in the off-shore fisheries. Its use is, however, limited by its relatively high price. Special concessions in respect of the import of scarce materials from hard currency sources have been granted. Additional supplies of rice and sugar were also made available to operatives servicing fishermen beyond the waters of the Colony.

A 24-hour service for the clearance and arrival of vessels was provided from the 1st June, 1951. It is now possible for any fishing vessel to comply with all administrative formalities at the control point on the water front in a matter of minutes. The movement of fishing craft has, therefore, been greatly facilitated. A water supply, ice shutes and an ice crusher were installed, the latter in conjunction with a leading ice manufacturer.

The arrival of a Master Fisherman and the consequent establishment of a Fish Production Unit permitted otter-trawling to be demonstrated. The activities of this unit are unfortunately hampered by the lack of a suitable craft though funds for its purchase are available.

A number of other projects including training in engine repair and maintenance, improved wholesale marketing facilities and provisions of funds for the design of improved fish retail equipment are under consideration.

The establishment of a Regional Marine Fisheries Research Station in Singapore has been approved and a Director has been appointed. Construction of the Station and ship is to commence next year. The Fisheries Officer (Research), Federation of Malaya and Colony of Singapore, also continued his study of the physical conditions and fisheries of the waters adjacent to Singapore.

MANUFACTURING INDUSTRIES

There is no heavy industry in the Colony of Singapore but the expansion of light secondary industries continued. Planning for the installation of new type industries was, however, considerable and by the end of the year a few of these were in an advanced stage of completion whilst plans for others were going ahead well. In most cases, constructional work on the ground was expected to start early in 1953.

Many of the larger proposed or semi-completed industries are located at the Colonial Development Corporation's industrial estate at Bukit Timah. Two of these, a textile mill and an edible oil factory had started experimental production by the end of the year. The others which include a boot polish factory and a rope manufactory will begin operations next year. There is no large industrial estate except that of the Colonial Development Corporation at Bukit Timah, but a number of new and sizeable industries have begun operations elsewhere in the Colony, one of the biggest of which is a canning factory. It has begun canning local foods, delicacies and soya sauce and the manufacture of a non-alcoholic beverage. The sauce plant at full capacity will produce some 14 varieties of sauce totalling some 500,000 lb. per month. The beverage unit is fully mechanized with a maximum output of 180 bottles per minute.

During the year, a Singapore glass factory set up a fully mechanized industrial plant capable of converting about 500 tons of kraft liner and straw paper into fibreboard, cardboard boxes and cartons and corrugated fibreboard. Six new engineering and foundry works and motor coach builders, a new brick making establishment, a cement works, a firm of concrete block manufacturers, and three new wire mesh manufactories were established during the year.

Apart from the development of new industry established factories and plants continued or expanded their output.

Aluminium Goods

The production of aluminium household utensils and rubber estate equipment continued in the hands of a large European firm and two smaller Chinese concerns and total output for the year was valued at \$2½ million. The industry employed a total labour force of 239 persons.

Beverages

The total production of the two local breweries for the year was 7,993,555 gallons of beer and stout. The industry continues to be a valuable one both from the point of view of export trade and the local market, and employed 710 persons. Aerated water manufacturing companies maintained output at 1951 levels and a new soft drink factory began production at the end of the year.

Building Materials

There was an increase in the total production of bricks, asbestos and cement products: 5.5 million bricks, approximately 1.5 million more than in 1951, were produced; production of asbestos, mainly in the form of roofing and sheeting and manufacture and marketing of concrete blocks were maintained.

Granite Quarrying

There are twenty-four quarries in the Colony; eleven on Crown land and thirteen on private land. The former produced 143,000 cubic yards of granite. Figures for the private quarries are not available.

Confectionery

The Colony's biscuit and sweet factories maintained production at the yearly average of the past two years; by the end of the year three new companies had started producing.

Distilleries

There were two licensed distilleries operating with a labour force of 69 persons. Samsu, the product of the distilleries, is

marketed in Singapore and adjacent territories. An excise duty is levied upon their products though exports are usually made ex bond. Total production for the year was 81,000 gallons, a decrease of some 10,000 gallons.

Electric Batteries

The demand for batteries fell during the year. This coupled with labour difficulties in the industry resulted in a fall in production to some 55.5 per cent of 1951 output. The number of people employed in the industry was 442.

Leather Shoes

One European firm continued to be the major producer of leather footwear in the Colony. Production of all types of shoes rose from 160,000 pairs to 180,000 pairs. The industry gave employment to 114 persons.

Metal Boxes

One firm employing 150 persons manufactures tinplate containers; total output for the year was 26,000,000 tin cans compared with the estimated production of about 30,000,000 cans in the previous year.

Oil Mills

The main production continued to be the refining of copra and palm oil for cooking oil, soap and margarine. The total output of coconut oil was 25,620 tons and of soap 237,903 cwt. compared with 19,675 tons of coconut oil and 261,198 cwt. of soap last year. Most of the mills are privately owned and belong to Chinese owners though there is one large public limited company having extensive business connections with adjacent territories.

Paints

The manufacture of paints and varnishes is confined to a single company which extended production to include a number of new types. Local sales decreased by approximately 10 per

cent over 1951 but export sales showed a remarkable increase of 125 per cent which is about eight times more than 1948.

Pineapple Canneries

No new pineapple canneries were established. Production of canned pineapples from the three canneries was 239,071 cases, an increase over 1951 of 9,264 cases.

Plywood

Further progress has been made in the establishment of this specialized industry in Singapore. Considerable quantities of plywood were sold during the year in local and overseas markets. The company plans to manufacture plywood flush doors and the first machines for this purpose have been installed.

Rubber Manufactures

A slight increase occurred in the quantities of rubber articles and equipment manufactured during the year; 2.7 million pairs of rubber shoes and sandals were manufactured. Output of rubber hose and tubing amounted to 364,000 lb., rubber compounds to 630,000 lb. and rubber sheeting to 566,000 lb.

Rubber Milling

No additional rubber mills were opened in the Colony. The labour force employed in the existing 13 factories totals some 2,715 men and women: 104,592 tons of remilled rubber were produced compared with 172,351 tons and 177,880 tons in 1950 and 1951 respectively.

Sago

In this processing industry, raw sago is refined and exported as pearl or sago flour. The Colony's six factories which are owned and controlled mainly by Chinese employed a total labour force of 436 persons; operations are still conducted by hand. During the year, 18,489 tons of flour and 4,960 tons of pearl sago were exported, most to the United Kingdom where it was principally used in the textile industry.

Soap

There was no change in the scope of production of locally manufactured soap though total production for the year fell to 237,903 cwt. from last year's total of 261,198 cwt. Of this output, 65,350 cwt. were exported to neighbouring territories. Some 270 persons were employed by the industry.

Steel Drums

Production of steel drums for the year was 303,884 of which the majority were forty-gallon steel containers for petroleum, palm oil and latex. The industry employed 60 men and women.

Tin Smelting

There is one major tin smelter in the Colony which is located on an island off Singapore. The bulk of the ore is obtained from buying depots conveniently located in the Federation of Malaya but substantial quantities are also imported from Thailand and elsewhere. These tin-in-ore imports from overseas totalled 7,949 tons while 57,694 tons were received by the smelters from the states of the Malayan peninsula. Exports of tin metal from Penang and Singapore totalled 64,117 tons.

The industry has enabled the Colony to become one of the greatest distributing centres for tin metal in the world and has been of benefit to shipping, banking and merchant interests here. For the mining industry, the smelting works provides an assured market at an economic cost since handlings are on a very large scale.

CO-OPERATIVE SOCIETIES

There are no Producers' Co-operative Societies in Singapore. There were, however, twenty-two Thrift and Loan Societies at the beginning of the year. Employees of one of the large oil companies are also interested in forming a society and a preliminary meeting has been held. Of these societies, eight were formed for the benefit of Government servants, four for employees of the City Council, one each for the workers in the

Harbour Board and Naval Base, six for mercantile employees and two for workers in the War Department.

Two new Thrift and Loan Societies for the civilian employees in the War Department at Nee Soon and Supply Reserve Depot of the Royal Army Service Corps were registered.

There were three Credit Societies at the commencement of the period. One additional society was registered for the monthly and daily-paid employees working in the Malayan Railway, Singapore. Of the three existing societies one was for the daily-paid employees in the Government Health Department, one was for the labourers in Bukit Sembawang Estate and the other for the monthly-paid Malay employees working as drivers and fitters in various garages of the Shell Company.

In addition to twelve Thrift and Investment Societies, one society for the Malays living at Kampong Ayer Gemuroh was registered early in the year. The appointment of a Malay Co-operative Officer in November has enabled more frequent visits which are essential for strengthening the weaker societies to be made. Several of these societies were considering the amendment of their By-laws to increase the scope of their activities and so to improve their economic condition.

Of the Consumer Societies, one shop society for the Malays living at the Malay Settlement off Jalan Eunus was registered for the sale of essential commodities during the year. One Store Society for the employees at Woodbridge Hospital was liquidated. The Singapore Co-operative Stores continued to show a considerable decline in business. An enquiry into the affairs of the Society was ordered by the Registrar. As a result, the Society decided on a drastic re-organization. The main shop at Victoria Street and the branch at Joo Chiat Road have been closed. The Society is operating on a small scale and with a reduced staff at Seng Poh Road at Tiong Bahru area. The failure of this shop which started with great promise is to be regretted. The attempts of some members to introduce politics into co-operation was partly to blame.

Thanks to the vigilance of the committee and support of the management of the Shell Company, the Co-operative Stores at Pulau Bukom had a remarkable recovery and was able to declare a dividend of 5 per cent on shares and a rebate of 5 per cent on purchases after writing off the loss incurred during the year 1951. The Naval Base Stores Society was given suitable premises by the authorities of H.M. Dockyard and commenced sales to members about the middle of the year. Business is rapidly increasing and a steady monthly profit is being recorded.

There were two societies under formation. The Singapore Hire Car Association wishes to form a Co-operative Garage and Stores Society for the owners and drivers of taxis in Singapore while the employees of Nanyang Printing Works and the associated companies also completed the preparation of the By-laws for a Stores Society.

Although suitable plots were not easily available and there was no decrease in the price of land, the Housing Society was able to recommence its building programme towards the latter part of the year. The Society shortly expects to make use of the loan of \$200,000 which the Government was prepared to grant for the purpose of purchase of land and building houses for its members. Since the registration of the Society in 1949, 46 houses have been built and 26 are under construction.

The membership of the Singapore Urban Co-operative Union consisted of fifteen Thrift and Loan Societies, one Store Society and one Housing Society. Besides meeting regularly for the consideration of matters affecting the progress of these societies, it also administered a Scholarship Fund by granting two annual scholarships for the children of members of the societies affiliated to it.

THE POSITION OF CO-OPERATIVE SOCIETIES AS AT 30TH NOVEMBER, 1952

Type of Societies	No. of Societies	Memberships	Subscription	Deposits	Loan Balance	INVESTMENTS			Cash in Banks	Reserve Fund
						Securities	P.O.S.B.			
1. Thrift and Loan	24	14,058	3,795,290	\$ 638,990	\$ 1,638,840	\$ 2,016,585	\$ 178,240	\$	\$ 469,220	\$ 149,370
2. Credit Societies	4	840	115,720	..	18,760	49,500	42,010	..	18,870	590
3. Thrift Societies	13	2,360	..	115,940	..	..	107,610	..	2,230	950
4. Housing Society	1	371	149,930	179,960	438,540	..	..	..	690	960
5. Urban Union	1	17	..	..	..	..	..	..	..	..
Total	43	17,646	4,060,940	934,890	2,096,140	2,066,085	327,860	..	491,010	151,870
6. Consumers Societies	4	7,214	87,060	Credit Sales 218,530	Cash Sales 304,970	Credit Purchases 358,860	Cash Purchases 135,740	..	Cash in Bank 50,940	Reserve Fund 13,620
Grand Total	47	24,860	4,148,000	..	..	..	..	..	541,950	165,490



VIII

Social Services

A—EDUCATION

ORGANIZATION, POLICY AND FACILITIES PROVIDED

THE EDUCATION system administered by the Department of Education includes all Government schools, Government Aided English schools, and all registered schools, aided or private. Seventy-one English schools in forty-six buildings, forty-eight Malay schools in thirty-one buildings, one Junior Technical school, a Handicraft school and one Nautical school were wholly financed by Government. The financial aid given to non-Government schools varies within wide limits and is very extensive. There are in fact very few schools in which either the management or the pupils do not receive assistance; those in which the management does not receive help are, almost without exception, proprietary schools run for profit. The assistance given to Aided English schools, and to Indian schools, is approximately equal to the running expenses of the schools, while Aided Chinese schools receive a capitation grant which varies according to the grading and standard reached: in addition a grant sufficient to cover the salaries of the teachers of English is paid to all Aided Chinese schools. The system of free, or subsidized, primary education,

which is applied to all registered schools except those for European children only, has now been in operation for over three years; under it those pupils born in Malaya and of the correct ages for their standards have their fees remitted in Government schools, and in other schools are given a subsidy equal to the fee charged in Government schools.

The Director of Education is assisted by a staff of administrative, inspecting and clerical officers, by the Singapore Education Committee, the Education Finance Board, and by various advisory committees for specific purposes. The Singapore Education Committee and the Education Finance Board are statutory bodies, the former being a consultative and advisory committee on matters of policy and administration, and the latter a body supervising the receipts, estimates and expenditure on all financial matters except those of personal emoluments of Government officers, and Public Works expenditure.

The numbers attending the Government Junior Technical School, and the evening classes in technical subjects were 185 and 738 respectively. Little further increase in these numbers will be possible in the space at present available. A new type of course started in 1950, designed to continue the education of pupils who have finished the primary English school course, and at the same time to give them practical and theoretical knowledge of several branches of technical training, has continued.

A second technical school, run by a mission authority in a rural area and which is now a fully Aided English school, has greatly increased its workshop space.

During the year a Handicraft school was started, at which attendance was voluntary and no fees were charged. There has been great competition for places in this school.

Mention should be made of the inauguration of a school for the training of sea-going personnel for M.O.T. Certificates. The school operates in the premises of the Marine Hostel, and at present holds two classes in Navigation and Nautical Engineering.

The average ages of pupils on entering and leaving in the various types of schools are as follows; English 7.4 and 18.4 years; Malay 8.0 and 12.3 years; Indian 7.6 and 10.4 years. The average age of entry to Chinese schools is 7.5 years. It is not possible to give a statistically valuable figure for the average age of leaving Chinese schools.

Expenditure on Education

Receipts consist of the proceeds of an education rate, and a donation from Government, the respective amounts this year being \$929,610.65 and \$8,150,856.96. In addition Government provides the salaries of the officers employed in the Department, and the cost of Government schools. The total official cost of education this year, including capital costs of schools, but excluding charges in respect of living quarters, was \$18,247,485 (provisional); the corresponding figures in 1950 and 1951 were \$8,648,919 and \$14,759,271. Of the total expenditure personal emoluments and recurrent expenditure amounted to \$15,870,485 and capital expenditure to \$2,377,000.

Grants-in-Aid to schools totalled \$6,172,000 (estimated). The corresponding figure in 1951 was \$5,254,000.

The allocation this year was as follows:—

	\$
English schools ..	4,487,000
Chinese schools ..	1,565,000
Indian schools ..	120,000
	<hr/>
	6,172,000
	<hr/>

The estimated expenditure by voluntary agencies, excluding grants from Government, was \$7,915,000.

Number of Schools, Teachers and Pupils

Full details on these matters are given in the table opposite.

**ENROLMENT IN SCHOOLS AND OTHER EDUCATION INSTITUTIONS
TOGETHER WITH NUMBER OF TEACHERS**

Medium of Instruction	No. of schools	NUMBER OF PUPILS			NUMBER OF TEACHERS		
		Boys	Girls	Total	Male	Female	Total
A. Government Schools							
English	72	23,617	8,553	32,170	1,028	533	1,561
Malay	48	5,456	3,123	8,579	231	85	316
Junior Technical Schools	1	185	..	185	14	..	14
Total ..	121	29,258	11,676	40,934	1,273	618	1,891
B. Government Aided Schools							
English	38	11,778	11,801	23,579	289	556	845
Chinese	87	32,432	17,221	49,653	783	593	1,376
Tamil	20	514	691	1,205	16	26	42
Junior Technical Schools	1	115	..	115	8	..	8
Total ..	146	44,839	29,713	74,552	1,096	1,175	2,271
C. Non-Aided Schools							
English	38	4,993	2,344	7,337	99	154	253
Chinese	192	17,493	6,958	24,451	322	293	615
Total ..	230	22,486	9,302	31,788	421	447	868
Total Registered Schools	497	96,583	50,691	147,274	2,790	2,240	5,030
Other Registered Institutions	41	5,734	2,214	7,948	153	17	170
Total Registered Institutions	538	102,317	52,905	155,222	2,943	2,257	5,200
Schools not Registered or exempt from Registration							
Chinese	5	873	388	1,261	17	15	32
Arabic	6	605	331	936	31	..	31
Total ..	11	1,478	719	2,197	48	15	63
GRAND TOTAL ..	549	103,795	53,624	157,419	2,991	2,272	5,263

Figures do not include students in the University, the Teachers' Training College, or classes run by the Adult Education Council.

Further Education in Malaya

The University of Malaya is organized in three faculties, Arts, Science and Medicine. The following tables taken from the Annual Report of the University 1951-52 show total numbers and distribution of students.

TOTAL NUMBERS

				Men	Women	Total
Arts	..	..	..	185	80	265
Science	..	..	..	113	16	129
Medicine	..	..	..	280	53	333
Dentistry	..	..	..	87	8	95
Pharmacy	..	..	..	32	5	37
Total ..				697	162	859

DISTRIBUTION BY RACE

	Arts		Science		Medicine		Dentistry		Pharmacy		Total		Grand Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Chinese ..	94	55	71	10	182	38	70	7	32	5	449	115	564
Malays ..	37	3	4	..	25	2	2	1	..	..	68	6	74
Indians ..	27	11	16	3	27	5	3	..	..	..	73	19	92
Ceylonese	15	6	15	3	39	5	9	..	..	..	78	14	92
Eurasians ..	11	3	4	..	6	3	3	..	..	..	24	6	30
Others ..	1	2	3	..	1	..	..	..	..	..	5	2	7
Total ..	185	80	113	16	280	53	87	8	32	5	697	162	859

At the end of the year there were 322 Singapore students (238 men and 84 women) at the University distributed among the various faculties as follows:—

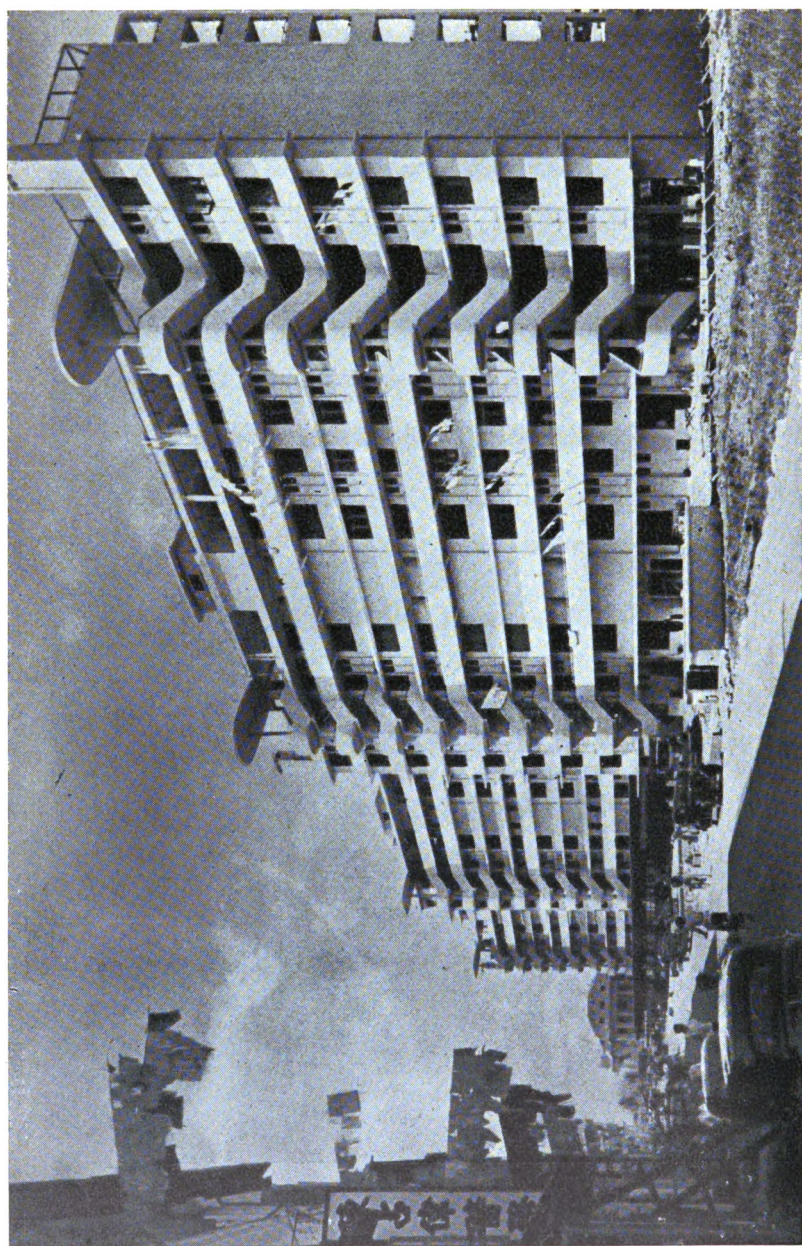
Arts	..	106	Dentistry	..	22
Science	..	45	Pharmacy	..	14
Medicine	..	135			

Further Education Overseas

Eighty-three students, who had been awarded Government scholarships, were pursuing further studies abroad. In addition forty-seven went overseas as private students. The latter figure is incomplete as records are kept only of those private students who approach the Department of Education for information and advice before going abroad.



Tropical Forest, water-colour painting by Phyllis Wee (Katong Convent School), aged 12 years



C. 4, Gibson-Hill

Three blocks of flats built by the Singapore Improvement Trust at Pickering Street

Of the Government and private students here listed 112 were in the United Kingdom, 16 in Australia, and 2 in New Zealand. Of these 62 are being paid for by Government, 13 from the Colonial Development and Welfare Fund, 6 by the Government of Australia and 2 by the Government of New Zealand; the remaining 47 are studying under private arrangements. These figures include 9 members of the Education Department, 1 of whom is studying in Australia, 1 in New Zealand, and 7 in the United Kingdom.

Twenty-three holders of Government scholarships returned to Singapore during the year. In addition 5 members of the Education Department were awarded scholarships tenable at the University of Malaya.

There was 1 Singapore student at the College of Agriculture, Serdang, and 27 students at the Technical College, Kuala Lumpur. Twelve of these were studying Civil Engineering, 8 Telecommunications Engineering, 5 Surveying and 2 were taking the Architectural course.

Teacher Training

There were in all 1,515 teachers, 13 less than in 1951, in training as follows:—

	<i>Men</i>	<i>Women</i>	<i>Total</i>
<i>A. In Singapore</i>			
(i) Teachers' Training College Certificate Course	88	73	161
Normal Classes	711	243	954
(ii) English Teachers under training in Private and Vernacular schools ..	76	32	108
(iii) Probationers under training in Malay schools	53	51	104
(iv) Chinese Teachers' Training Classes	68	85	153
(v) Post graduate students taking Diploma of Education at University of Malaya	4	2	6
<i>B. In the Federation of Malaya</i>			
Sultan Idris Training College ..	22	—	22
Malay Women's Training College ..	—	7	7
Total ..	1,022	493	1,515

The number of fully trained teachers who entered schools and the percentage they form of teachers in each of the different types of schools is as follows:—

<i>Type of School</i>	<i>No. of trained Teachers entering schools</i>	<i>Percentage of Total in each category</i>
Government and Aided English schools	.. 211	8.09
Chinese schools .. ..	.. 55	2.76
Malay schools .. ..	.. 14	4.42
Tamil schools* .. ..	.. Nil.	Nil.

ADULT EDUCATION

The Council for Adult Education is an independent body consisting of representatives of the organizations concerned with adult education as well as of the University of Malaya and the Government of Singapore. This year the grant received from Government was \$311,978. By the end of the year there were 6,806 students (4,389 men and 2,417 women) attending 251 language classes. Of these classes 167 were English, 81 Mandarin, 2 Tamil and 1 Malay. The Secretary of State for the Colonies has approved a grant of \$300,000 under the Colonial Welfare and Development Act to erect a building which will serve as a Headquarters for the Council.

IMPORTANT EVENTS OF THE YEAR

The slight decrease in the rate of development under the Ten-Year Education Plan and the Five-Year Supplementary Plan reported last year continued. The building programme approved for this year consisted of 9 Supplementary schools and 2 Ten-Year Plan schools; there were in addition portions of programmes approved for previous years which had not yet been completed. School buildings continued to follow the approved type plans, single storey types under the Supplementary Plan and two-storey types under the Ten-Year Plan. The number of complete school

*Of the forty-two teachers in Tamil schools ten are at present attending a training course.

buildings actually erected during the year was 13 made up of 11 Supplementary and 2 Ten-Year plan schools, of which 6 were completed late in the year and will not be occupied until 1953. In addition 2 Ten-Year plan schools were under construction at the end of the year.

These are the figures for Government schools only. The Aided English schools, which form an intrinsic and valuable part of the education system also increased their accommodation very considerably, either by erecting new schools or by building new extensions. Such projects are aided by Government to the extent of 50 per cent of the approved cost.

A noticeable feature of the year was the rapid progress towards maturity of the new schools built since 1950. Many had by the end of this year taken pupils to Standard V and entered them for the common qualifying examination for entry to secondary schools. The paramount difficulty was still the provision of staff owing to the very small number of trained teachers who could be spared for each new school. The few carried on amazingly well, not only looking after their own classes, but helping the comparatively raw probationers who were in charge of other classes. In the rural and more sparsely populated areas development was at a much slower rate, but the need for the schools was shown clearly by the figures of the enrolments in the lower classes. There seems to be no doubt that all schools will be full within a few years, and that there will be increasing need for additional schools. The stumbling blocks to future expansion are still the provision of sites, teachers, and buildings in that order. Vacant land in the City area is at a premium and great difficulty is being experienced in finding sites which are not only within reasonable reach of the children, but are also large enough to provide playing fields and are situated away from main traffic routes.

The teaching of Science, particularly in girls' schools, is still inadequate, although the fullest possible use is made of existing facilities. A science wing was added to one Government

boys' school, and plans are in hand for providing three other schools with science blocks. One of these is a girls' secondary school.

Post-School Certificate classes were maintained in several schools; and with all universities, including the University of Malaya, insisting on such work before matriculation, it seems certain that this development will become a permanent part of the educational system. This year sixty-three candidates entered for the Cambridge Overseas Higher School Certificate examination. Thirty-six sat for the examination.

The spirit of co-operation shown by Chinese schools has been very noticeable and is an indication of the useful work done by the liaison officer appointed in 1951.

Education Week which has now become an established feature of the academic year in Singapore was again very successful. The outstanding feature was a great Rally of Youth which was attended by over 20,000 schoolchildren. Her Royal Highness the Duchess of Kent graciously consented to attend this Rally.

B—MEDICAL

Despite difficulties caused by the limited facilities, which the Ten-Year Medical Plan is designed to remove, further improvement in the general health of the Colony was maintained this year. Singapore can still claim to be one of the healthiest seaports and large population centres in the East. The birth rate remained at the very high post-war level of 47.5 per 1,000 (51,196 births) while the general death rate continued its downward trend to 11.20 per 1,000 (12,060 deaths). The death rate is considered to be very low for a tropical territory such as Singapore which is in close contact with areas far less healthy; its proximity to these areas makes impossible comparison with such countries as the United Kingdom where epidemics of diseases such as malaria do not constitute a constant threat. That Singapore Island is virtually free from malaria is a cause of some satisfaction.

The infant mortality rate of 69.97 per 1,000 live births is the lowest in the Colony's history and represents no small achievement in a tropical country of which a high proportion of the population is concentrated in congested one-room cubicles. Although the planned Rural Maternity and Child Welfare Scheme is still in its earlier stages the infant mortality rate of the rural population (about 360,000 persons) which is thought now to be under 60, is a record. It is hoped ultimately to reduce the general infant mortality rate to the level of the 40's. The present general Colony rate compares with 130 before the war and nearly 300 during the Japanese occupation. The Malay rate has fallen from the pre-war figure of over 200 to 120; the Indian and Pakistani from some 100 to 66; the Chinese from 150 to 62. It is the fall in the Chinese infant mortality rate which is most significant as nearly 80 per cent of the Colony's population is Chinese. The European infantile mortality rate approximate to the present United Kingdom figure. The infant mortality rate of the Colony is subject to influences and diseases which do not occur in more temperate climates, and is affected by the adherence of a large proportion of the population to Eastern forms of medicine. It will be a decade or more before Western teaching concerning the feeding of infants is generally appreciated, before the need to take the two inoculations against diphtheria is realized and the importance of early hospitalization of infant dietary disorders is accepted.

The maternal mortality was 1.80 per 1,000 live births compared with 1.63 in 1951 and 1.85 in 1950. That this figure was not much higher is satisfactory when it is realized that there were 17,000 deliveries during the year in the 200-bed Maternity Hospital and when due weight is given to the inevitable effect of the overcrowded conditions in which so large a percentage of the population lives. The post-war figures are very much lower than they were before the war; the corresponding rate in 1939 was 4.0.

TOTAL NUMBER OF DEATHS, RATE PER MILLION OF POPULATION AND COMPARISON WITH THE AVERAGE
RATE FOR 1939/1941 BY PRINCIPAL CAUSES OF DEATHS

Causes	AVERAGE 1939/41		1947			1950			1952		
	No. of Deaths	Rate per million	No. of Deaths	Rate per million	Index	No. of Deaths	Rate per million	Index	No. of Deaths	Rate per million	Index
Malaria and unspecified Fever ..	1,159	1,547	1,207	1,274	82	819	806	52	438	407	26
Violence (all forms) ..	477	637	573	605	95	494	486	76	467	434	68
Beri-beri ..	654	873	398	420	48	246	242	28	257	239	27
Senility ..	927	1,237	955	1,008	81	1,033	1,017	82	925	859	69
Pulmonary Tuberculosis ..	1,714	2,288	1,468	1,550	68	1,211	1,193	52	956	888	39
Heart Diseases ..	491	655	403	425	65	557	558	85	692	642	98
Diseases of the Circulatory System ..	168	224	112	118	53	204	201	90	204	189	84
Diseases of Pregnancy, Childbirth and the puerperal state ..	145	192	125	132	68	86	85	44	91	84	44
Premature births and diseases of early infancy ..	849	1,135	853	900	79	812	800	70	827	768	68
Infantile Convulsions ..	1,793	2,393	1,519	1,603	67	1,364	1,343	56	1,052	977	41
Diseases of the respiratory system excluding Tuberculosis and Influenza ..	2,216	2,958	1,878	2,012	68	2,034	2,003	68	1,953	1,813	61
Typhoid, Dysentery, Diarrhoea and Enteritis ..	1,350	1,802	954	1,007	56	1,185	1,167	65	1,307	1,213	67
Carried forward ..	11,943	15,941	10,445	11,054	..	10,055	9,901	..	9,169	8,513	..

Indices are based on 1939/41 average rate per million of population.

TOTAL NUMBER OF DEATHS, RATE PER MILLION OF POPULATION AND COMPARISON WITH THE AVERAGE
RATE FOR 1939/1941 BY PRINCIPAL CAUSES OF DEATHS—continued

Causes	AVERAGE 1939/41		1947			1950			1952		
	No. of Deaths	Rate per million	No. of Deaths	Rate per million	Index	No. of Deaths	Rate per million	Index	No. of Deaths	Rate per million	Index
<i>Brought forward</i> ..	11,943	15,941	10,445	11,054	..	10,055	9,901	..	9,169	8,513	..
Other diseases of the digestive system	409	546	253	267	49	429	422	77	316	293	54
Tuberculosis other than respiratory system ..	186	248	167	176	71	266	262	106	250	232	94
Diseases of the genito-urinary system ..	548	731	277	292	40	242	238	33	361	335	46
Diseases of the nervous system ..	438	585	263	278	48	320	315	54	357	331	57
Influenza, Acute Rheumatism ..	279	372	208	220	59	86	85	23	74	69	19
Cancer ..	353	471	306	323	69	340	335	71	512	475	101
Others ..	1,147	1,531	592	625	41	574	565	37	1,021	948	62
Total ..	15,303	20,425	12,511	13,235	65	12,312	12,123	59	12,060	11,196	55

Indices are based on 1939/41 average rate per million of population.

Of particular importance is the rapid growth of the population, especially as this increase is now by natural means and not, as before the war, due to immigration of adults. This means that a very high proportion of the population is very young and that further natural increases in population must be expected. Moreover, the very large and steadily increasing birth rate is combined with a steadily decreasing death rate.

The table on page 132 shows deaths from main diseases and indicates that the general improvement has been maintained. Infantile convulsions and unspecified fever are still named as the cause of much illness and children continue to be admitted to the 90 medical beds in the Pediatrics Division of the General Hospital, and the 250 beds of the Infectious Diseases Hospital in a moribund condition in too large a proportion of cases. Diphtheria and gastro-enteritis are receiving special attention by the expanding Infant and Child Welfare Services and cancer is the subject of special study.

Expansion

By the end of the year the new nurses' home and the new out-patient division of the General Hospital were nearing completion. The latter will enable a real concentration on out-patient treatment which will relieve the pressure on hospital beds. The strain on out-patient and in-patient accommodation continued to be intense: 607,561 out-patients attended the hospital clinics (compared with about 90,000 before the war), and 45,630 in-patients were admitted to the General, Kandang Kerbau, Women's Diseases, and the V.D. institutions (compared with 25,000 before the war).

Work on the second stage of the Leper Settlement Scheme continued. New accommodation is now available for nearly 300 patients. The yearly increase of cases remains at about 90 without any indication of a drop. Singapore now has over a thousand lepers to look after compared with about 200 before the war. The new treatments are proving effective but the rate of cure and discharge remains low partly because many of the inmates come under observation only after the disease has reached an advanced stage.

Two new rural maternity and child welfare clinics were opened during the year, and a new and more rapidly attainable rural welfare scheme was designed under which the rural area with its population of 360,000 is divided into seven health districts. Each district will have a main centre on which will be based a doctor, sisters, nurses, hospital assistants, dispensers and ambulance, travelling dispensaries, sanitary inspectors and anti-malarial staff. On these main centres will be based up to a hundred supplementary nurse and midwife centres and visiting centres. At present there are three main district centres with 38 smaller centres—twice as many as there were five years ago. The present Government Rural Health staff consists of four doctors, two matrons, six sisters, thirteen nurses, thirty-three midwives, fifteen sanitary inspectors, sixteen anti-malarial workers, sixteen scavenging workers, and eleven dispensers and hospital assistants.

Staffing in the Medical Department improved considerably during the year and it is expected that most of the existing vacancies will be filled soon from the housemen who are undergoing their first year of service, but as the Medical Plan proceeds a steady further recruitment will be necessary, which it should be possible to meet almost entirely from Singapore students now in training. The following figures show the number of doctors, dentists, registered nurses, qualified midwives and registered pharmacists:—

DOCTORS AND DENTISTS ON REGISTER

			<i>Doctors</i>	<i>Dentists</i>
Private Practitioners ..	..	209	29 (qualified)	259 (unqualified)
Government ..	..	109	14 (qualified)	
Housemen ..	..	26	—	
University ..	..	27	7*(qualified)	
City Council ..	..	10	—	

Note:—Of the non-Government doctors seven are employed in missions.

*Four temporary special registration.

NURSES ON REGISTER

			<i>Females</i>	<i>Males</i>
Government	..	..	.. 319*	169
City Council	..	..	.. 49	—
Private	..	..	.. 75	4

QUALIFIED MIDWIVES

Government	..	62
City Council	..	10
Private	..	913

PHARMACISTS ON REGISTER

Private Practitioners	..	68
Government	..	5
University	..	2

Despite improvements in equipment there are still two serious difficulties, the high proportion of rather inexperienced officers in the Medical Department and the comparative unpopularity of Public Health as a career. Time will correct the former, but for some years to come it will be necessary to recruit a small number of more experienced officers from elsewhere on short term contracts if possible. Without the prospect of the fees which medical and surgical consultants may eventually look forward to receiving, a career in the Public Health Service lacks attraction for many potential officers. Yet this branch of medicine is essential to the future well-being of all Eastern communities.

The Medical Plan cannot be realized unless recruitment of nurses keeps pace with the expansion of facilities and for this reason the provision of accommodation and training schools is being accelerated and has already led to a great increase in recruitment in December, although the numbers of student nurses coming forward are still far smaller than the numbers which are required. The construction of the new nurses' home and the formation of the Nursing Board is encouraging recruitment. At the end of the year seventy probationer nurses, twenty-three assistant nurses, and nine T.B. nurses joined the service. So long as recruitment falls short of requirements, assistance from non-Government organizations such as that given by the Order of the Franciscan Sisters of the Divine Motherhood in tuberculosis nursing is most welcome.

*Plus 219 student nurses and 66 assistant nurses.

The Director of Medical Services is assisted by four statutory boards: the Medical Board, the Dental Board, the Pharmacy Board and the Nursing Board. During the year legislation to amend the Medical Registration Ordinance was drafted. It is designed to broaden the constitution of the Medical Council and to provide for a compulsory year of service as houseman. Voluntary organizations and advisory committees such as the Ladies Diversional Therapy Unit, the Leper Welfare Committee, the Singapore Anti-Tuberculosis Association, the Rotary Club of Singapore, St. John Ambulance Association and Brigade and the Singapore Branch of the British Red Cross Society continued to give invaluable assistance. During July, the Governor laid the foundation stone of the Crippled Children's Home of forty beds sponsored by the Singapore Branch of the British Red Cross Society, from funds contributed by all races, and in December, the Rotary Club of Singapore began work on a community centre and school for the Leper Settlement. Other voluntary committees such as the Blood Transfusion Service Committee, the Nutrition Council, the Public Health Conference, the V.D. Committee and the United Nations International Children's Emergency Fund Committee are also making a valuable contribution to the work of the Medical Department.

The three almoners who at present constitute the comparatively new Almoner's Division are concerned with following up cases of discharged patients, and the Tuberculosis Domiciliary Relief Scheme which is described later in this Report plays an important role in the treatment of tuberculosis. A Tuberculosis Home Association was also formed to assist in chronic cases of tuberculosis among destitute persons. A further important addition to the Colony's hospital facilities was made when the Kwong Wai Siu Chinese Free Hospital added 58 maternity beds to its previous 350.

A most successful voluntary vaccination campaign was held during the year when some 70 per cent of the total population came forward for vaccination without any fatal case. The success

in persuading lepers to apply for treatment has already been described but efforts to deal with diphtheria have been disappointing because parents will not bring their children for the second inoculation. Intensified publicity was accordingly given to the need for these two inoculations but the response is slow. Despite its position in a malarious zone Singapore is normally free from malaria, but only because of constant vigilance. That the danger of malaria is ever present is apparent from the sudden outbreak of this disease when uncontrolled building operations take place or labour is recruited from outside the Colony.

Hospitalization

The hospital bed accommodation at the end of the year was as follows:—

	<i>Beds</i>
General	750
Kandang Kerbau (excluding cots) ..	240
Tan Tock Seng	540
Orthopædic	70
Prisons	140
Social Hygiene (excluding cots) ..	70
Infectious Diseases*	250
Lepet Settlement	724
Police Training School	20
Mental	1,733

Non-Government Institutions

The following institutions provide beds for the public:—

	<i>Beds</i>
Kwong Wai Siu Free Hospital (Chinese) ..	400
St. Andrew's Mission Hospital (Children) ..	30
Malayan Union Mission of Seventh-Day Adven- tists	24
Hainanese Hospital	20
Kheh Hospital	30

The first two of the above are run entirely for the poor, and the Kwong Wai Siu caters for both Chinese and Western forms of medicine.

*The Infectious Diseases Hospital is under a joint Government and City Council control.

Despite the fact that more beds are now in use than ever before, the number is quite inadequate and the Medical Plan proposes to double the present accommodation. By 1953 or early in 1954 beds in the General Hospital should be brought to 1,000 and at Kandang Kerbau to 350. An up-to-date out-patient division for Kandang Kerbau is also planned. Increased accommodation at the latter hospital is urgently required: this year 20,426 cases were admitted to its 200 maternity and 40 gynæcology beds. Figures of attendances at all hospitals were a record: 607,561 out-patients and 45,613 in-patients were treated compared with 501,529 and 38,497 respectively in 1950. It is clear from these figures that the medical staff has worked under considerable pressure, but despite this it is thought that results have justified the policy of giving some medical attention to as many as possible rather than first class attention to a much more limited number. Singapore now possesses the most up-to-date eye division in South-East Asia; the new orthopædics division which started work early in the year has already expanded into a sizeable unit and the physiotherapy and almoner divisions have done excellent work towards rehabilitating cripples. A new X-ray unit at the Kandang Kerbau and Mental Hospitals and more equipment at the General and Tan Tock Seng Hospitals has brought the X-ray division up-to-date. New deep X-ray apparatus now on order designed to supplement that installed in 1949 will provide good facilities for the treatment of malignant disease, but it is still difficult to recruit experienced and qualified staff for this division to deal with the rapidly increasing demands which are made upon it. During the year 69,146 X-rays were taken compared with 50,000 in 1951 and 6,000 before the war, and a total of 991 cases of malignant disease were treated at the General, Kandang Kerbau and Tan Tock Seng Hospitals.

The Blood Transfusion Organization provided blood for 4,404 persons, and received blood from 4,551 donors compared with 996 and 725 respectively in 1947. Undue reliance had again to

be placed on donors from the Armed Services; although Chinese donors showed an increase over any previous year to 1,356, the number of Chinese recipients also increased to 3,454. Corresponding figures for 1951 were 1,003 and 2,399 respectively. Most of the patients treated in Singapore are Chinese and throughout the year continued efforts were made to overcome their strong prejudice to giving blood, but results are still very disappointing.

While there was no epidemic of acute anterior poliomyelitis during the year the disease maintained its endemic manifestations. The number of new cases added to those from the three post-war epidemics justifies the scheme inaugurated some time ago to supply the long term treatment which this serious affliction requires, but out-patient treatment has unfortunately not proved successful, for despite interviews and continuous visiting the majority of local parents cannot be relied upon to bring their children to the out-patients department regularly. For these reasons a special separate hospital unit has to be maintained for the treatment of these cases. The Colony now has fourteen iron lungs.

Tuberculosis

Pulmonary tuberculosis continued to be the disease of major importance and concern to the public and to the Medical Services, though the number of deaths from this disease has fallen over the years as is shown by the following figures:—

		<i>Rate per million</i>
1939/41 average	..	2,288
1947	..	1,550
1948	..	1,491
1949	..	1,315
1950	..	1,193
1951	..	1,096
1952	..	888

The Tan Tock Seng Hospital which contains a free clinic presented by the Singapore Rotary Club continued to be used as the principal Government centre for the hospitalization and outdoor clinic treatment of cases of pulmonary tuberculosis. There are 400 beds in this institution. A total of 1,465 in-patients were treated of whom 235 died. The total number of out-patients in regular attendance is now 4,300, and about 14,000 cases have passed through this hospital since 1946.

A certain number of very acute cases of tuberculosis continued to be treated at the General Hospital either after emergency admission or because the disease was discovered in the course of other investigations. Such conditions as tuberculous meningitis are mostly dealt with at this hospital. During the year, 160 cases of tuberculosis in one form or another were treated at the General Hospital and there were 121 deaths. This high death rate is largely due to the admission of many moribund cases when little can be done, and partly due to the fact that for some reasons not yet fully understood local children appear to do less well than is the general experience in Europe with this type of case. The Children's Orthopædic Hospital which has 70 beds treated a number of cases of bone and joint tuberculosis.

During the year, Her Royal Highness the Duchess of Kent opened the Singapore Anti-Tuberculosis Association's new clinic. The Association's out-patient and treatment centre dealt with an ever increasing number of cases and the out-patient clinic at Tan Tock Seng Hospital through its almoner and health visitors' divisions provided ambulatory and domiciliary relief treatment on a much increased scale. It was thought that the out-patient clinic accommodation provided at this hospital in 1949 would prove sufficient until the Medical Plan took effect, but the accommodation is already stretched to the limit. It is the aim of the Medical Plan to increase the number of tuberculosis beds to 1,100 and the necessary training schemes to complete the first stage of this programme are proceeding.

A scheme for the provision by voluntary bodies of homes for chronic and destitute tuberculosis patients is under consideration, and in the meantime the tuberculosis treatment allowance scheme which is described in detail in the section on Social Welfare has played a vital and essential part in plans for dealing with tuberculosis. This scheme cost \$890,887 this year and is expected to cost a million dollars next year.

Venereal Disease

The campaign against venereal disease started in 1945 was continued with a special hospital of 70 beds with male and female clinics attached, an out-patient clinic in the dock area and a service which ensures that cases are followed up. There are also evening clinics for men and a Social Hygiene travelling dispensary fully equipped with the materials needed for the examination, diagnosis and treatment of patients suffering from venereal disease which co-operates with the ante-natal clinics of the Rural Health Service. This organization was completely overhauled during the year and has been described by a visiting expert as one of the best that he has seen within the limits of the staff and accommodation available. An essential part of the organization is a small corps of female supervisors which follows up cases. The number of out-patients continues to increase from 72,913 in 1948 to 105,592 in 1950 and 125,150 this year, of whom 42,046 were women and 83,104 men. New cases numbered 18,436, of whom 6,844 were women.

Systematic ante-natal blood tests have been introduced in the rural clinics to reduce the incidence of congenital syphilis. Daily treatment of dermatological complaints by V.D. patients is now available in the Social Hygiene Hospital; this helps to gain the further confidence of the poorer patients and saves them the extra expense and waste of time involved in travelling to different places for treatment. The out-patient figures above show the number of patients who report or are referred to the



A new ten-year plan school completed this year

Standard Photo



Low-cost housing built for people resettled at Bedok

Public Relations



C. A. Gibson-Hill

A seven-storey hotel rises behind a typical street market

Venereal Disease Department for diagnosis and treatment or for confirmation of the absence of venereal infection. The efficiency of the present organization and methods of treatment may be judged by the reduction in the prevalence of venereal disease and the fall in the number of actual new V.D. cases from 10,460 in 1949 to 7,787 in 1951 and 6,340 this year.

The Venereal Disease Advisory Committee which was formed during 1949 and consists of representatives from the Services, the Police, the Medical and Social Welfare Departments continued to meet when necessary to study the methods of treatment in use and to co-ordinate the efforts of all those concerned in dealing with this disease. All modern methods of treatment are in use.

Mental Disease

It is unfortunately necessary to report that the number of cases treated in the Mental Hospital continued its steady increase. The number of in-patients at the end of the year was 1,733. It appears that a yearly increase of about 200 can be expected despite the discharge rate of 59 per cent of new admissions. It follows that the present accommodation which is suitable for 1,800 in-patients will have to be expanded immediately. It is not yet possible to say with certainty whether post-war conditions are responsible for this increase in mental disorders nor whether the number of those requiring institutional treatment will become stabilized in due course.

RURAL HEALTH

Rural Maternity and Child Welfare

The expansion of the Rural Maternity and Child Welfare Services has already been described. Two new centres and a residential midwife centre on Pulau Ubin have been opened and when the scheme is properly developed these Rural Health Centres in addition to providing facilities for maternity and child welfare and school medical work, will each have a laboratory; a

dispensary and specialist services. There are now eleven main centres with resident nursing staff, six subsidiary centres with resident midwives, and twenty-four other centres where weekly clinics are held by the staff of the main centres. Two full-time medical officers hold clinics at these centres. Three residential centres and seven visiting centres are provided on the islands off Singapore.

During the year 188,024 persons attended the clinics and 100,364 visits were made to homes. Rural Health staff attended 8,917 confinements out of a total of 14,641 in the rural area.

Anti-Malarial Measures

As in previous years both permanent and temporary measures were maintained but an attempt is being made to devise a programme directing effort more towards improved permanent control, a development which is made necessary by the rapid urbanization of the rural area. There was an example of the need for this development when a small outbreak of malaria occurred in a new housing estate developed in an area which up to that time had not been subject to anti-malarial oiling. The disturbance of the earth during construction of the housing estate and the importation from outside the Colony of labourers infected with malaria introduced the necessary requisites for the transmission of the disease, and this outbreak emphasizes very clearly the need for constant attention to the risk of malarial outbreaks consequent upon the rapid utilization of land. In this case prompt and intensive oiling and other measures prevented a serious outbreak. Altogether during the year only twenty-nine cases of malaria were reported from the rural areas, twenty-seven of which were either imported or relapsed cases. Houses on the islands off Singapore are regularly sprayed with D.D.T.

Water Supplies, Housing and Sanitation

The Rural Board continues to extend the piped water supply and to instal standpipes where they are most urgently required.

On the small islands off Singapore water is obtained from sub-soil wells and by drilling, but on some of the islands the supply fails occasionally and water has to be provided by sea.

The housing shortage and consequent overcrowding of existing accommodation continued throughout the year despite considerable new building by the Singapore Improvement Trust and by private enterprise. The pressure of the rapid growth of the population is felt in the rural area as well as in the City.

In most areas removal and disposal of nightsoil is conducted by contractors and pending the installation of a complete sewerage system little improvement is likely until a cheap form of septic tank system suitable for local conditions can be devised. Chemical closets are becoming more popular but require constant supervision before and after installation to ensure that they do not cause a nuisance.

Scavenging is the responsibility of the Rural Board but is generally entrusted to contractors. The Board is considering the creation of a scavenging division to collect and dispose of all refuse under its own supervision.

Floating and Rural Travelling Dispensaries

A floating dispensary commissioned in 1950 has proved of great benefit to a large section of the rural population which is isolated from any of the ordinary health services of the Colony, and its scope is being extended. Maternity and Child Welfare staff from time to time accompany the dispensary. In addition, three travelling dispensaries, each in charge of an hospital assistant, visit all areas of the island which are not served by static centres. These travelling dispensaries dealt with 55,349 cases during the year of which 36,498 were new cases.

SCHOOL MEDICAL SERVICE

With the recruitment of more medical officers it was possible to carry out many more routine medical examinations of school children than in any previous year but the eight medical officers

and nine nurses devoted to this work could do little more than cover children entering and leaving school. Altogether 41,181 children were examined, special attention being paid to tuberculosis. Out of a total of 147,536 children enrolled in Colony schools 86,973 were seen in routine and special examinations, and 101,937 children were re-vaccinated.

Reasonably good health was observed in 98.2 per cent of boys and 90.3 per cent of girls. Vision on the whole was good and skin conditions showed improvement over previous years. Routine worm treatment continued to be carried out by the school health nurses and the staff of the travelling and out-door dispensaries.

A central school clinic and two subsidiary clinics serving particular areas deal with the treatment of minor ailments in pupils and teachers. The need for a much larger and more modern school and dental clinic which will also provide adequate facilities for specialized treatments, for B.C.G. storage and immunizations and for many other activities which a school medical service demands is now beginning to be felt and the necessary provision has been included in the Medical Plan.

Radiography of teachers and children continued with considerable assistance from the Singapore Anti-Tuberculosis Association. All classroom contacts were investigated and 4,475 children were radiographically examined bringing the total examined since the war to 19,498. Of the school children X-rayed during the year 346 (7.7 per cent) proved to be suffering from an active primary complex and 0.9 per cent from the adult type. Tuberculin testing was carried out on 41,426 children and 15,383 were given B.C.G. inoculation. The tuberculosis domiciliary feeding scheme continued throughout the year, each child being completely examined every three weeks. At the end of the year 153 children were receiving this attention.

Two thousand seven hundred and twenty-five school inspections were carried out with particular regard to sanitation, tuck shops and other methods of feeding.

School Dental Service

With four dental chairs in operation for the first time at the school dental clinic it was possible to examine 6,786 children. Children were selected for treatment in accordance with the programme laid down in 1950. Each dental officer selects about 2,000 children to whom he gives appropriate dental treatment. They are then re-examined and treated again during the following year. As the service expands it is hoped by this method within a few years to cover all schoolchildren. Children who were not selected for routine treatment received emergency treatment as required for the relief of pain. In addition, towards the end of the year four special nurse clinics were inaugurated as part of a new scheme to augment treatment given by qualified dental surgeons.

Air and Port Health

Altogether 1,230 aircraft arrived from infected or suspected ports; 35,028 crew members and passengers were inspected by two medical officers; 510 passengers had to be put on surveillance because they did not possess valid certificates of immunization.

It is hoped that the new International Airport now under construction at Paya Lebar will satisfy all the requirements of Article 20 of the International Sanitary Regulations, World Health Organization Regulations, No. 2. The number of ships and sea-borne passengers inspected at the Quarantine Anchorage declined owing mainly to an amendment of the Quarantine (Medical) Rules, which now give discretion to the Port Health Officer to confer privileges of radio pratique. More ships have also been declared as mail ships. Altogether 1,469 vessels of a total net tonnage of 5,230,812 were cleared and 88,804 passengers inspected during the year by one port health officer and one health officer (quarantine).

Infectious Disease

No major infectious disease occurred in the Colony and no epidemic manifestation was observed. A total of 166 typhoid

cases was reported. The prevalence of diphtheria continues to be high. Greater efforts will be made to immunize children who have not yet entered schools and among whom the mortality rate is very high. There were 464 cases of diphtheria, 50 cases of acute anterior poliomyelitis and 21 cases of tropical typhus were reported.

Civil Defence Medical Services

The medical services in an emergency will need to be expanded considerably, for not only will it be necessary to provide hospital accommodation for the ordinary sick but additional provision must be made for the treatment of civilian casualties. So it is essential in peacetime to make plans to provide not only for the necessary number of additional beds and for the expansion of the ancillary services but also to ensure that the necessary additional staff will be trained and that medical stores and equipment are available.

An Emergency Medical Plan has been framed which calls for the formation of a number of casualty hospital units, the establishment of static first-aid posts and the creation of mobile first-aid units. In addition expansion of the ancillary services is planned. These casualty hospital units and services will be equipped and built up gradually.

One service in particular which will be of the utmost importance is the Blood Transfusion Service. The requirements in time of war will be considerably greater than at present, and a large expansion of this essential service is being planned. Very many more blood donors will be needed and efforts will be made to recruit them.

Nutrition

This year, the Singapore Advisory Council on Nutrition sought to implement its policy that an adequate diet should be available to all people in the Colony. In order to increase the nutritive value of the diet, the recommendation was made that Government should consider a policy of enrichment of rice and other staples which could be put into effect immediately should

a deterioration in health be observed. It was considered that the scope of the child feeding scheme should be enlarged to cover the needs of all children in the Colony who require such assistance. An alteration in the dietary patterns is necessary in order to make the best use of available foodstuffs and the Council considered that education was an important factor in bringing about this change. With this in mind the Council is investigating the requirements for training in nutrition at various levels for public health workers.

The Division of Applied Nutrition, University of Malaya, made use of the records of the maternity hospital for a study of the effect of the age and the parity of the mother on the birth weight of the off-spring. It was found that the birth weight increases with parity and that the difference is significant. The effect of age is much less and of doubtful significance. However the two factors together account for only a small proportion of the observed variation in the birth weights of infants.

The growth study of the first year of life of 250 Chinese and Southern Indian infants living in the urban area of Singapore was completed. The gains in weight and length will be analysed in relation to the feeding, the medical history and the external environment of the infant. The records of Government welfare clinics have been collected for comparison with the weights obtained for the study groups. These infants will be kept under observation as part of a study of the progress of pre-school children.

The Division co-operated with the staff of the Eye Clinic, General Hospital, in the investigation of a number of families in the urban and rural areas. The object of these inquiries is to ascertain the major causes of keratomalacia in infants.

Students

No changes were made in the system of awarding financial aid to students in the Faculty of Medicine at the University of Malaya. The Government awarded seventeen bursaries during the year, thirteen to new medical students and four to new dental students.

Staff Relationships

The appointment of a Personnel and Welfare Officer in the Medical Department has done much to improve staff relationships, and this in turn has led to an improved spirit of service. Protracted negotiations for improved salary scales for the technical subordinate section of the Health Division completed during the year resulted in considerable increases of emoluments.

Government Medical Store

The Government Medical Store and Pharmaceutical Laboratory completed its move to the new premises built in 1951. As was expected, the use of proper store warehouses and well designed manufacturing laboratories has greatly improved efficiency. Part of the store staff was transferred to laboratory work and the smaller number of personnel employed in the store was able without difficulty to deal with the much increased turnover of medical supplies. The value of stores issued to hospitals, clinics and welfare centres during the year was \$1,450,000 and the value of stock in store at the end of the year, including reserve stock for civil defence, was \$1,840,000.

The new pharmaceutical laboratories completed 1,700 work orders and manufactured pharmaceutical products valued at \$180,000 which represents a very large increase over the figures for previous years. The quality and packing of the galenicals, injections, and tablets produced are excellent, and the laboratories are now equipped for the production and manufacture of the larger quantities of pharmaceuticals which will be required as the medical services expand.

This steady expansion of medical services cannot be achieved without a great increase in expenditure. The annually recurrent cost this year of the Government Medical Services described above (including cost of buildings) is \$17,855,694 compared with \$12,557,616 in 1951 and \$7,216,780 in 1950.

PUBLIC HEALTH

General Health

As is usual the various death rates for the City area are somewhat higher, in some cases considerably higher, than those for the island as a whole.

In the absence of any effective means of correcting the statistics by allowing for transfers to and from the rural area, the Federation and the adjoining islands, before the urban rates are computed the higher rates obtained for the City area compared with those for the rest of the island or the island as a whole are not surprising particularly when due weight is given to the effect which the presence of the port, various hospitals, medical facilities, orphanages, homes for the aged and medicine-men in the City must exercise on them. Differences in the race, age, and sex distribution of the population in the City, compared with those for the rest of the island and the island as a whole may also account for some of the difference between the rates for the City and those for the rest of the island or the island as a whole.

Principal Disease Groups—Mortality Treatment

When considering the number of deaths certified as due to the various diseases and the death rates from the various diseases it should be borne in mind that these figures must necessarily be inaccurate as about a quarter of the persons who die in the City do not seek medical advice or treatment before death.

The chief causes of death and the rate per 1,000 living in the City were as follows:—

	Deaths	Rate per 1,000 living
Respiratory diseases other than Tuberculosis	1,704	2.09
Diarrhoea and Enteritis	1,119	1.45
Pulmonary Tuberculosis	879	1.14
Diseases of early infancy	770	0.99

During the year 3,527 cases of tuberculosis (all forms) were notified. Of these at least 537 were known to have been ordinarily resident outside the City. Excluding the latter cases the notification rate for all forms of tuberculosis for the year was 3.87 per 1,000 living.

The maternal mortality rate for the year in the City was 1.9 per 1,000 births.

The uncorrected crude general death rate for all races combined in the City was 12.15 per 1,000 of the estimated population as against 12.72 in 1951 and the uncorrected infantile mortality rate for all races combined was 75.5 as against 78.9 in 1951.

City Health Department

Apart from treatment provided for infectious disease cases at the City Council Infectious Diseases Hospital and the medical treatment provided for members of the staff employed by the Council at the City Council Dispensaries, the Council's Health Department activities are mainly confined to preventive measures undertaken by the Anti-Mosquito Department to control malaria; by the Infant Welfare Department to provide a free midwife service where needed, to advise on infant and child health, and to immunize infants and young children against diphtheria; by vaccinators who aim at vaccinating all infants before they have reached the age of six months; by the Assistant Health Officers and Sanitary Department, who take steps to prevent the spread of infectious diseases in general, by following up cases and contacts and by tracing sources of infection; by the Chemical and Bacteriological Departments to ensure the purity of the water supply, and ice cream on sale in the City; by the Food and Drugs Inspectors and other Sanitary Inspectors who examine the food supplies; and to ensure the abatement of nuisances and the sanitary control of premises where foodstuffs are prepared or sold.

Staff

The table opposite shows the distribution of the staff of the Health Department.

DISTRIBUTION OF STAFF OF THE CITY HEALTH DEPARTMENT

Department	Health Officer	Sanitary Inspectors	Clerical Staff	Messengers and Attendants	Analysts	Laboratory Assistants	Superintendents	Hospital Assistants	Anti-Mosquito Inspectors	Overseers	Store-keepers	Watchmen	Sisters	Staff Nurses and Nurses	Assistant Nurses	Stewards	Midwives	Vaccinators	Ambulance Drivers	Labour Force	Total
1. Administration—																					
Main Office ..	5	36	15	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	67
2. Analytical Laboratory ..	..	..	2	9	4	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
3. Bacteriological Laboratory ..	2	..	1	4	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
4. Anti-Mosquito Department ..	1	1	1	1	..	1	1	..	2	16	1	1	..	..	..	..	..	..	..	605	631
5. Cemeteries ..	..	1	..	..	..	..	5	1	..	..	..	..	..	..	..	..	..	..	..	120	126
6. Markets ..	..	1	15	..	..	..	..	..	..	7	..	13	..	..	..	..	..	..	..	78	114
7. Middleton Hospital ..	1	..	1	81	..	..	..	6	..	..	..	..	5	12	21	1	..	..	..	..	128
8. Midwives and Infant Welfare Dept. ...	4	..	5	10	..	..	..	1	..	..	..	..	13	34	..	..	10	..	..	..	77
9. Births and Deaths Department ..	..	..	7	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	9
10. Slaughter Houses ..	..	6	6	2	..	..	..	..	..	..	..	9	..	..	..	..	..	..	..	93	116
11. Vaccination ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	5
12. Other Public Health Services ..	..	3	..	..	..	..	..	1	..	2	..	..	..	1	..	..	..	..	6	5	18
13. Dispensaries ..	2	..	..	6	..	..	..	7	..	..	..	..	..	..	..	..	..	..	..	..	15
14. Kampong Sanitation ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	50	51
Total ..	15	47	53	124	4	16	6	18	2	26	1	23	18	47	21	1	10	5	6	951	1,394

CITY HEALTH DEPARTMENT

REVISED INCOME AND EXPENDITURE FOR THE YEAR 1952

Head of Account	REVISED ESTIMATED EXPENDITURE, 1952		Revised Estimated Income 1952
	Annually Recurrent	Special Services	
	\$	\$	\$
(A) Administration	647,340	..	119,849
(B) Analytical Laboratory ..	168,333	16,750	126,000
(C) Bacteriological Laboratory ..	85,219	500	75,073
(D) Anti-Mosquito Measures ..	970,740	4,500	..
(E) Cemeteries	279,774	53,000	20,609
(F) Markets	283,433	25,800	542,487
(G) Middleton Hospital ..	402,005	144,335	..
(H) Midwives and Infant Welfare ..	513,206	..	..
(I) Registration of Births and Deaths	52,999	..	..
(J) Slaughter Houses ..	333,162	26,600	722,980
(K) Vaccination	26,284	..	..
(L) Other Public Health Services ..	443,286	..	..
(51C) City Dispensary and other medical attention for Staff ..	113,410	..	..
Total ..	4,319,191	271,485	1,606,998

City Council Infectious Diseases Hospital (Middleton)

Number of beds—200. This hospital is run by the City Council aided by Government. It provides facilities for treatment and isolation of the dangerous infectious diseases small-pox, plague and cholera, and also for enteric, diphtheria, chicken-pox, poliomyelitis, cerebro-spinal fever, the dysenteries, measles, and whooping cough. As an interim measure provision is also made for the treatment of post-polio cases by physiotherapy.

Infant Welfare Clinics

Here advice on infant and child health is given to pre-natal and post-natal mothers and mothers of infants. Advice on 'family planning' is also provided. Vaccination of infants against small-pox and immunization of infants against diphtheria is also undertaken at these clinics. Midwives employed by the City Council live at each of these clinics and their services are available free of charge.

Dispensaries are provided where the staff employed by the City Council may obtain free medical treatment.

MEDICAL RESEARCH

Research was carried out on the following conditions during the year:—

Japanese Type B Encephalitis—This virus has been isolated from three fatal cases of encephalitis occurring in the Colony. In all cases the patients were under 10 years of age. Further investigation has revealed that race horses are also attacked by this virus although it is not generally a fatal disease in horses. It would appear that within six months of arrival in the country 90 per cent of horses have contracted either a subclinical or clinical infection. Investigations are proceeding to establish the extent of infection in the Colony and if possible the epidemiological conditions. Although the work is still at a very early stage it appears that infection with the virus is probably widespread but frank clinical cases of the disease presenting encephalitis symptoms are more uncommon.

Cancer—Particular attention is being given to the incidence and treatment of the various forms of cancer. The following table indicates the various forms of tumour which have been diagnosed during the year.

CANCER AND OTHER TUMOURS

	<i>Total Treated</i>	<i>Deaths</i>
Cancer or other malignant diseases of the buccal cavity and Pharynx and Oesophagus	93	25
Cancer or other malignant tumours of the digestive organs, and peritoneum:		
(1) Stomach	96	32
(2) Liver	80	27
(3) Other digestive organs	61	19
Cancer or other malignant tumours of the respiratory organs	65	25
Cancer or other malignant tumours of the uterus ..	277	5
Cancer or other malignant tumours of other female genital organs	16	2
Cancer or other malignant tumours of the breast ..	51	3
Cancer or other malignant tumours of the male genito-urinary organs	57	15
Cancer or other malignant tumours of the skin ..	15	2
Cancer or other malignant tumour of organs not specified	180	37
Total ..	991	192
Tumours non-malignant:		
(1) Of female genital organs	180	5
(2) Of other sites	175	4
Tumours of undetermined nature:		
(1) Female genital organs	19	..
(2) Other sites	47	4
Total ..	421	13

A study of the histogenesis and spread of lymphoepithelioma (anaplastic squamous-cell carcinoma) of the nasopharynx has been carried out by the Senior Pathologist and his report is expected to be ready in the near future.

Trachoma and Keratomalacia—Particular attention was also paid to trachoma and keratomalacia, the former from the point of view of incidence in school children where it is thought to vary from 3 per cent downwards according to various observers, the latter in regard to dietary and home conditions in the newly born.

The small-pox vaccination campaign which covered some 700,000 people may also be recorded under the heading of 'Research' in that a campaign of such magnitude gave an opportunity of studying the various types of reaction and the danger to be expected from such a procedure. No fatalities were recorded and only four cases of severe vasicular eruptions were reported.

Tuberculosis—(1) During 1951 out-patient treatment with Streptomycin and P.A.S. was instituted. This was carried on into this year and the experiment was controlled by the Bacteriology Department of the University of Malaya who did culture tests for Streptomycin resistance using the same methods of standards as that described by the Veterans' Administration Report at the 9th Streptomycin Conference. Over 300 cases in the series were tested and it was found that resistance developed with the dosage used at Tan Tock Seng Hospital in 10 per cent of all cases. As the type of case treated was often most unpromising these figures can be regarded as satisfactory as there is no doubt whatever that the benefit accruing to the patient is very considerable. The course used at Tan Tock Seng Hospital totals 68 G. of Streptomycin given in two bi-weekly injections of 2 G. each while at the same time 12 G. of P.A.S. are given orally in tablet form.

(2) The use of Isoniazid (Nydrizid) Rimifon.

Research on Leprosy—Experimental work was carried out with Tebacyl and Isoniazid in addition to the more standard treatment with Sulphone (D.D.S.) Sulphetrone or Thiasemicarbazone T.B.1.

C—TOWN PLANNING AND HOUSING

PLANNING

The Singapore Improvement Trust has the authority and duty to prepare a Diagnostic Survey and Master Plan for the Colony. A Diagnostic Survey and Planning Team arrived in January and commenced work on the survey immediately. The Team which works under the guidance of Sir George Pepler, C.B., P.P.T.P.I., F.R.I.C.S., Planning Adviser to the Government has now completed a year of intensive work and is well on the way to the preparation of a Master Plan which must be completed by the end of 1954.

The Master Plan

As was explained in last year's Report, the object of the Master Plan will be to ensure that the limited land resources of the densely populated Island of Singapore shall be used to the best advantage of the community as a whole. Consequently, the Plan

must be based upon a thorough understanding of the land, of how it is at present used and on estimates of future needs for housing, industry, food production, recreation, defence, etc. The Team is advised by a number of voluntary groups of persons possessing practical knowledge of the resources and needs of the Colony with reference to such matters as industry, building and construction and traffic.

A Preliminary Plan for the general guidance of development, pending the completion of the Master Plan, was well on the way to completion by the end of the year.

Statutory Planning

The statutory planning work of the Trust which is now being guided by the information furnished by the Diagnostic Survey Team is summarized below.

Improvement Schemes

Work on the Trust Improvement Schemes which had been held in abeyance for some years, owing to shortage of senior and junior planning staff and inadequate data and statistics, was continued in the latter part of the year, when the staffing position had improved and the necessary statistics from surveys made by the Diagnostic Survey Team became available.

Revised plans for the Covent Garden Improvement Scheme and the Telok Ayer Improvement Scheme were approved by the Board of Trustees in December. The layout of the Bukit Timah by-pass road was approved in 1951 and work on acquisition is proceeding. When this road is completed there will be a complete duplication of Bukit Timah Road from Newton Circus ($2\frac{1}{2}$ miles from the centre of the City) to the 7th mile Bukit Timah Road. Acquisitions are also proceeding on the Ring Road from Holland Road to Alexandra Road and almost half of the formation work on the Alexandra Road/Henderson Road portion is complete.

Development Plans

Preliminary plans have been prepared for the Trust's Development Areas at Alexandra Road West (about 530 acres) and Whampoa Area (about 700 acres). The layout of Crown land at Telok Ayer Basin was approved in December.

Private Layouts

Most of the planning work of the Trust, however, has concerned the control of private development. There has been a further marked increase in the number of applications for planning permission and for approval for the layout of private holdings this year. There were 950 applications under Section 58 of the Ordinance of which 508 were approved. These provide for some 5,500 building units.

Planning Control

During the year, the Trust has paid particular attention to the procedure for dealing with applications for 'Planning Permission and Layout Approval' to ensure compliance with all the requirements of planning under the Ordinance, and at the same time minimizing delay in reaching a decision. The Board accordingly on 10th September appointed a Planning Committee, which thereafter has met twice a month to consider Planning Applications. To ensure that the best use is made of their land prospective developers have been encouraged to consult the Trust's planning officers before drawing up their proposals, and have been advised to seek planning permission for large projects before submitting accurate plans for the sub-division of their lands.

The preparation of land for housing development has been a function of the Planning Department. Earth filling has had to be transported up to a maximum of five miles, and the total work completed during the year amounted to approximately 200,000 cubic yards.

The Work of the Diagnostic Survey Team

The work of the Diagnostic Survey Team has included the following surveys:—

- (1) General Land-Use Survey of the City, Suburban and Rural Areas, with special surveys of the following—
 - (a) Industrial Use;
 - (b) Burial Grounds;
 - (c) Open Spaces;
 - (d) Vacant Building Plots.
- (2) Public Utilities Survey, including Water, Gas, Electricity and Drainage.
- (3) Preliminary Traffic Surveys—(a) Volumetric, (b) Origin and Destination, (c) Parking, and
- (4) Survey of Building Resources, including Building Labour, Building Materials and Finance.

During the year various study groups have been appointed to assist in producing data of a specialized nature required for the Master Plan. These groups which include officers of the Government, Trust, City Council and the University of Malaya, and representatives of industry and commerce have studied building resources, industrial resources, population, traffic and social conditions.

HOUSING

Housing Need

Previous Reports have referred to the housing famine in the Colony. One of the worst features is overcrowding in old and dilapidated property which is badly maintained because of scarcity of alternative accommodation and rent restriction; but much of the overcrowding takes place in structurally sound property which could be maintained in better condition if fewer people lived in it.

The magnitude of the housing problem can be appreciated when it is realized that if 60,000 new dwellings of all descriptions could be provided immediately at rents which tenants could afford to pay, the present housing need would be satisfied.

But if the present rate of increase in population continues, and the present rate of home building is not increased, the need in ten years' time will be for approximately 100,000 dwellings.

At the end of the year, there were 11,128 families representing about 70,000 people on the Register for Singapore Improvement Trust housing. The Singapore Improvement Trust housed or rehoused 1,385 families during the year, 755 from the Register and 630 displaced by slum clearance. At this rate it would take 15 years to deal with the number now on the register. But this number is not static: 2,502 new applicants were registered this year, which is 1,117 more than were actually rehoused.

The ability of an applicant to pay rent is very difficult to assess, as the total family income may be much in excess of the declared earnings of the applicant. From investigations and questionnaires, it would appear that a large proportion of applicants are earning between \$300 and \$400 a month but are generally not prepared to pay more than \$40 a month rent.

Many applicants however earn less than \$200 a month and it is not now possible to build for this category and charge economic rents. Rents for Trust houses built this year range from \$36-\$91, and these are not fully economic. Moreover 95 per cent of the applicants on the Register wish to be housed within the City area, where land is scarce and expensive.

Housing Policy

Government grants loans to the Singapore Improvement Trust at favourable rates of interest, repayable in 60 years, for approved housing programmes. A loan of \$16 million was approved in November.

The Trust for public housing, works out its own policy concerning types of buildings, methods of construction, rentals, choice of sites, method of selection of tenants, housing management and maintenance of property, within the financial and administrative limits imposed upon it.

S.I.T. Housing Programmes

Singapore Improvement Trust Programme No. 4, started in 1951, was originally designed to provide 758 three-bedroom flats, 1,180 two-bedroom flats, 400 artisans quarters and 95 shops at an estimated cost of \$16 million. After modification as a result of rising prices this programme when completed in 1953 will have provided 572 three-bedroom flats, 856 two-bedroom flats, 448 artisans quarters and 58 shops at a total cost of approximately \$17½ million.

Programme No. 5 originally provided for 502 three-bedroom flats, 1,191 two-bedroom flats and 66 shops at an estimated cost of \$20 million but at the end of 1951, owing to the great rise in prices, the programme was drastically revised to include only 114 three-bedroom flats, 56 two-bedroom flats, 504 one-bedroom flats and 18 shops at an estimated cost of \$7½ million. But by August of this year, prices were dropping slightly and the supply of materials seemed to be more stable. Research into low-cost methods had provided some very economical designs and the programme was accordingly expanded to include in all 639 three-bedroom flats, 1,928 two-bedroom flats, 156 one-bedroom flats and 22 shops at an estimated cost of 18½ million. The expanded programme should be completed by the middle of 1954.

In spite of the slowing up in the letting and execution of contracts, the total provision of 1,375 flats, 448 artisan quarters and 63 shops completed this year at a cost of about \$13¾ million far exceeds that of any previous year. A further 1,742 flats and 26 shops were under construction at the end of the year.

Types of Housing

The new economy units are of 2 and 3-storey load bearing concrete block construction designed on the most economical lines possible, taking full advantage of the provisions of the new Code of Practice for Low-Cost Housing produced by the Building By-law Revision Committee and approved by the City Council.

Whilst still maintaining a high standard of structural soundness to minimize maintenance costs, the general appearance and finishings are of an austerity type.

The proposals for flats now include a new low-cost 7-storey design for sites of good bearing capacity. Tenders for two schemes of this type have already been received and have been found to be well within the estimates. Work on these and other schemes will commence early in 1953 and provided there is no change in present conditions, it is expected that the programme will proceed speedily and economically. All schemes under construction at the end of this year will be completed during 1953 and it is expected that the total number of units completed will exceed 2,000 for the first time in the Trust's history.

Housing Costs

When the Trust started its post-war housing programme in 1947, it was possible to build an artizan quarter for \$3,000 and a good quality flat for between \$7,000–\$8,000. These costs included site preparation, roads, paths and piling where necessary. In 1950, the new type of reinforced concrete and hollow block construction was adopted which reduced the cost of flats to between \$5,000 and \$6,000, and it was then possible to provide housing which 90 per cent of the applicants could afford.

Early in 1951, the cost of building leapt by about 50 per cent so that the \$8,000 flat cost nearly \$12,000, and the \$6,000 flat cost \$9,000. Single storey artizan quarters jumped to nearly \$5,000. At the end of 1951 it was obvious that the Trust could not go on building to the old standards, and the new economy units were therefore designed, and the building programmes completely recast. The costs of the new economy units are as follows:—

- (a) Three-storey \$5,000–\$6,000 per unit complete, according to the nature of the foundations and site preparation.
- (b) Seven-storey \$6,500–\$7,200 per unit on good foundations, according to amount of site preparation and services.

Rents:

- (a) Two, three or four rooms with rents varying between \$40 and \$54.
- (b) All three-roomed. Rents approximately \$60.

The Trust no longer builds single storey artizan quarters as they are uneconomical in land and services.

Another experiment in the production of low-cost houses is being carried out by the Land Office on Crown land at Bedok. Up to the end of the year, 26 houses of different types had been constructed.

Squatter Resettlement

The squatter problem is one of great and growing dimensions for it is estimated that in the City area alone, there are approximately 150,000 people living in illegally constructed houses of plank and attap, corrugated iron and old kerosene tins, huddled together in squalid insanitary kampongs, with inadequate access or drainage and without proper facilities for conservancy or nightsoil disposal. Because the old brick shophouses in the City are already crowded to overflowing, the squatter community is growing as the population increases and new huts and extensions are built overnight. Prospective builders have experienced endless worry and delay in clearing housing sites and rehousing squatters, many of whom are unable or unwilling to pay the rents of Singapore Improvement Trust houses. Various committees of Government, the Singapore Improvement Trust and the City Council have studied this problem and Government has now decided to make use of the one hopeful feature in the housing problem, the willingness and ability of many of these squatters to build their own shelter provided they are given a small piece of land.

This year the Government accepted the responsibility for large squatter resettlement schemes to enable squatters to be moved off land which is required for development and rehoused until the development has been completed on sites specially set aside for the purpose. The land for these resettlement sites is being provided free of cost by the Government.

Work on the first of these resettlement areas was commenced this year and was almost completed at the end of the year. Each site will be provided with roads, drains, communal latrines

and bathing areas and hardstandings on which tenants will construct their own huts. A rent of \$10 per month will be charged to cover the cost of the development and a further charge of \$7 a month will be made to meet conservancy and water charges. These schemes are intended to be a temporary expedient to last for 10 years by which time it is hoped that alternative accommodation for the squatters will have been provided. The first scheme will provide 164 hardstandings and two other sites of a total area of more than 150 acres have been earmarked for similar development. The work of developing the sites and administering the schemes has been entrusted to the Singapore Improvement Trust acting as the agent of the Government. During the year, \$550,000 were set aside for resettlement schemes and a further \$5 million will be provided for the same purpose next year.

Housing by Other Agencies

In addition to work completed by the Trust, the following public and private housing was completed in Singapore during the year:—

GOVERNMENT STAFF HOUSING

Within City Limits	..	..	65 (plus 40 included in S.I.T. figures already quoted.)
Rural Area	..	..	95

CITY COUNCIL STAFF HOUSING

Junior Officers Quarters	..	..	9
Labourers' Rooms	325

PRIVATE HOUSING

City Area

Living units of all kinds	996
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Rural Area

Dwelling Houses:

(a) Permanent	183
(b) Temporary	317

Shop Houses:

(a) Permanent	29
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Terrace Houses	52
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Flats	33
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Labourers' Lines:

(a) Permanent	41
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In all, a total of 4,062 dwelling units were constructed by both public and private agencies compared with 2,425 in 1951.

Organization and Administration

Approximately half of the organization of the Singapore Improvement Trust is engaged in Housing, Housing Management and Administration. The other half is engaged in Planning and Improvements. The Trust is organized into the following departments—Architects Department, General Improvement Plan Department, Survey Department, Secretariat, Accountants Department, Estates Department, and Diagnostic Survey Team.

Housing Management

With the introduction of the New Housing Register in 1951, and the rapid expansion of Housing Estates in the past five years, the work of management has assumed very large proportions and the staff engaged under the Estates Manager at the end of the year numbered 65 and employed 327 estate labourers. This Department has recently assumed the responsibility for the supervision of 1,700 Crown tenancies which consist of reverted 99-year lease properties in the congested areas of the City, awaiting clearance and redevelopment of sites. Seven officers will be engaged in this work. Most of these properties are in very bad structural condition and grossly overcrowded. Many millions of dollars will be required for the rehousing of their occupants, and many more for the redevelopment of the sites.

A staff of twelve under a Deputy Lands Manager is engaged in the management of Singapore Improvement Trust land and four will be engaged in the patrolling and supervision of Crown land on the island, a task that has recently been undertaken on behalf of Government.

Research and Experiments

The traditional materials used in Singapore are plank and attap for the rural areas, and brick and tile for the urban areas. The former is still the most economical method for the very lowest

type of shelter for short-term periods, and is suited to the climate. It is however being rapidly challenged by very low-cost hollow block and other methods. For permanent buildings, brick and tiles are still predominantly used in bungalow construction, but in blocks of flats and where mass housing is required, traditional methods are rapidly and continually giving place to new innovations. The Trust, in particular, has led the way in research and experiments on new methods of design, planning and construction and in the use of new materials and new methods for old materials.

Immediately after the war, pioneer work was done in pre-cast post and panel construction of the most economical type for use in artizan quarters, which is now widespread. The introduction and general use of hollow blocks is almost entirely attributable to Trust work; at first in the form of lightweight blocks with integral reinforced concrete frame, and later as load bearing blocks. Concrete blocks have now almost superseded bricks where economy in cost is a prime requisite. In planning and design, full use has been made of the new Code of Practice for Low-Cost Housing which has allowed up-to-date schemes of this type second to none in the world.

Singapore is in no way backward; it is keeping abreast of the times and the modern trends in building techniques. It is hoped that before long a Research Station will be set up in the Colony to investigate the use and behaviour of materials, and the problems of planning and design in this climate. The researches of such an establishment would be applicable not only to Singapore and Malaya, but to many other countries in the Far East.

Legislation

The Singapore Improvement Trust works under the Singapore Improvement Ordinance, 1927, and Section 148 of the Municipal Ordinance.

Section 44 (3) of the former introduced in 1930, allows the Trust to erect buildings with the approval of the Governor in Council. The Trust has no other statutory powers or obligations for housing.

A short amending Ordinance, No. 49 of 1951, provides for the preparation of a Diagnostic Survey and Master Plan, and gives the Trust limited control over the use of land.

Government's Contribution

The extent of the efforts which the Singapore Government has made and is making to alleviate the housing shortage in the Colony is not generally known. This assistance usually involves financial aid in some form or another and since it is the public's money which is used it is important that the limited sums available are used to the best advantage and for the benefit of the greatest number of people.

Extensive assistance has been given to the Singapore Improvement Trust. A free gift of \$10 million made before the war and exhausted in 1948 has been followed by loans of considerable sums of money on very favourable terms. These loans so far total \$38.2 million and a further loan of \$21 million has been requested next year. This money has been found from reserves and the position may well arise that the Government itself will have to borrow at a higher rate of interest in order to finance its own development programmes such as the Education Plan and the Medical Plan.

Loans made to the Trust are at favourable rates of interest which are always considerably below the current price of money in the open market. These loans are repayable over a period of 60 years which means that public money is tied up for a very long time. Without this assistance the Trust would have to charge very much higher rents to its tenants. As it is, with sums loaned by Government the Trust has since the end of the war been able to accommodate 7,620 families, and by concentrating on provision of low-cost housing it expects to complete over 2,000 housing units in 1953.

The Government also helps the Trust by contributing annually one dollar for every dollar raised by the Trust Improvement Rate. This year, this contribution amounted to \$834,289.

In addition to the wide assistance described above, Government is also giving special help where this is needed. One example is the resettlement scheme which was introduced to rehouse people dispossessed when land was acquired in the Paya Lebar area for the new International Airport. For their resettlement an area of land was purchased at Bedok which has been drained, provided with roads, and sub-divided into plots. The cost of this scheme up to the end of this year was \$1.6 million. Methods by which Government officers can be assisted to purchase their own houses are also being investigated and it is hoped to arrange a special house purchase scheme with the Federation and Colonial Building Society which will receive financial assistance from the Government. Similar help on a smaller scale has been given to the Singapore Government Officers' Co-operative Housing Society which has been offered a loan of \$200,000 at the low interest rate of $3\frac{1}{2}$ per cent.

Despite the substantial assistance from the Government which has been described above, however, the housing problem persists, and it is hoped that private individuals and institutions will join the Government by making their own contribution to the further schemes which will be required to alleviate the housing shortage.

D—SOCIAL WELFARE

Welfare activities in Singapore are undertaken both by the Government and by a number of private agencies. These agencies, some of which were the pioneers in welfare work, are responsible, among other things, for a good half of the institutional accommodation available for the aged and orphans and other children and young persons in need of care and protection and for much of the youth welfare work in the Colony. The aim of the Department of Social Welfare is to provide necessary welfare services in those fields of social work which are not already covered or which are only partially covered by other Government Departments and by the private agencies. Liaison between

the various Departments and voluntary organizations concerned in welfare measures and avoidance of unnecessary overlapping in the functions of these bodies is ensured by the existence of the Singapore Social Welfare Council, the objectives of which are to advise Government in all matters affecting the social welfare of the people and to co-ordinate the activities of its member organizations. The Secretary for Social Welfare is Chairman of the Council, and Government Departments and voluntary organizations are both represented on it.

The Department of Social Welfare is now in its seventh year. At the time of its formation, the energies of its officers were necessarily concentrated on the urgent but often temporary problems which arose as a result of the social and economic dislocation caused by war. This was followed by a phase of rapid expansion, as welfare work was developed as a permanent feature of Government activity. The emphasis in the past two or three years has been on the very necessary consolidation and improvement of the existing activities of the Department following the previous phase of rapid expansion. It is responsible for the administration of the various public assistance schemes, for all Court probation services, for the operation of various residential institutions, children's social centres and creches, for services in connection with the care and protection of women and children and for the provision of advice and enquiry services for the general public. It also conducts social research and does much to encourage the formation and development of youth organizations.

The progress made in social welfare work this year has been solid, if unspectacular. The work of the Public Assistance Section and the sums which it is responsible for disbursing have grown with almost unbelievable rapidity in the last eighteen months. There have been considerable developments in the provision of special facilities for handicapped children; the Department has opened a small home for mentally deficient children, whilst the Canossian Institute has opened a home for

handicapped girls; the foundation stone of the Red Cross Home for Crippled Children was laid by the Governor in the middle of the year and the home will be officially opened early in 1953. Plans for organizing blind welfare work in Singapore were drawn up by Sir Clutha MacKenzie during a three weeks stay in the Colony as United Nations Consultant and, if the plans of the newly formed Singapore Association for the Blind mature, it will not be long before Singapore has a residential school for blind children.

With the return from the United Kingdom in July this year of an officer of the Department who had studied law and been called to the Bar, it became possible to establish a section providing legal advice. A person with a legal problem who satisfies the means test laid down by the Department now has direct access to a Poor Man's Lawyer. Among other important developments during the year, the scope and organization of anti-vice work have been improved considerably, and owners of brothels and hotels of doubtful repute are finding it harder to conduct their business than ever before. Again, there have been improvements in the organization of placing in employment and after-care of boys and girls leaving Departmental Homes.

There have also been developments of importance in social work performed by non-Government organizations. The role of the Red Cross and the Canossian Institute in work for handicapped children has been mentioned above. The Children's Society, inaugurated in February has made a very successful start and promises to carry out effectively its objects of preventing cruelty and promoting kindness to the children of Singapore.

The training of officers of the Department, both in Singapore and in the United Kingdom, has continued, and the stage has now been reached at which about half of the Division I officers have, since the war, either received a general professional training in social work or taken degree or diploma courses which have a direct bearing on the specialized work which they undertake in the Department. At the end of the year, three Departmental

officers were on study courses in the United Kingdom whilst two others (one an Assessor in the Public Assistance Section and the other a Warden of a Boys' Hostel) were attending the first two-year Diploma Course in Social Work at the University of Malaya.

ADVICE AND ENQUIRY SERVICES

The Citizen's Advice Bureau is at the service of both the public and Government Departments, and directs individuals to the proper authorities, sometimes assisting them to prepare their cases. Some of the more important categories of case-work undertaken by the Bureau are in respect of:—

- (a) disputes over ejection and resettlement of occupants of attap huts;
- (b) tenancy disputes; and
- (c) the issue of Presumption of Death Certificates.

Only 41 applications for Certificates of Presumption of Death in respect of persons who disappeared during the war were received and 31 Certificates were issued, bringing the total number issued since 1946 to 1,450.

Much work has been done by the legal officer following the passage of the Adoption of Children (Amendment) Ordinance, this year. Under the old legislation, many *de facto* adopters were unable to legalize adoptions because of domiciliary requirements or for financial reasons. A start has been made in interviewing the 2,000 persons registered in the Department as having the custody of transferred children with a view to discussing the question of legal adoption in each case. This work will continue to occupy much of this officer's time in 1953.

PUBLIC ASSISTANCE

The Public Assistance Scheme

This year the expenditure on Public Assistance amounted to \$913,104. This expenditure was greatly in excess of that in any previous year, due to the appreciable increase in the number of cases assisted and to the introduction, in August 1951, of a new

comprehensive Public Assistance Scheme with greatly enhanced rates of benefit. The Scheme provided for the following classes of persons found to be in need:—

- (i) the aged (males and females aged not less than 65 and 60 respectively);
- (ii) those suffering from advanced tuberculosis;
- (iii) widows and orphans;
- (iv) the permanently disabled;
- (v) the temporarily disabled; and
- (vi) unemployed.

Persons showing proof of not less than 20 years' residence in the Colony in the case of category (i) above, and not less than 10 years' residence in the case of categories (ii) and (iii), were entitled to benefit at the rate of \$15 per month for the applicant or head of household, plus \$5 per month for each dependant, subject to a maximum of \$45 per month for any one family. Those in categories (i), (ii) and (iii) not fulfilling this residential qualification, together with those in categories (iv), (v) and (vi), who could prove a minimum of 3 years' residence, were eligible for a lower scale of \$10 per month for the applicant or head of household, plus \$4 per month for each dependant, subject to a maximum of \$35 per month.

The rates of Public Assistance benefit are acknowledged to be below subsistence level, but it has been established that the majority of able-bodied persons below the age of 60 manage to earn a few dollars each month by 'doing odd jobs' whilst remaining technically unemployed in that they have no regular gainful employment. All applicants are subject to a means test. The aged, who are in most cases without any income, receive a monthly grant from the Silver Jubilee Fund in addition to their Public Assistance benefit. A sickness allowance is payable under the Public Assistance Scheme in cases where the head of household is sick and has been unable to work for more than a month, and, in special circumstances, where wives and other dependants are sick. This year, this additional allowance amounted to \$10 per month for the head of household (\$14 per month if living alone), plus \$4 per month for each unemployable dependant.

The T.B. Treatment Allowance Scheme

The payment under the T.B. Treatment Allowance Scheme of allowances at scales well above subsistence levels is restricted to patients whose prognosis is good and who are likely to be returned to their former working capacity within a reasonable space of time. In no circumstances are patients suffering from chronic forms of tuberculosis considered for allowances under this Scheme—such persons are catered for under the Public Assistance Scheme. The recommendation of cases for assistance is undertaken by the medical authorities of Government hospitals and the Royal Singapore Tuberculosis Clinic. The continued payment of allowances, which are calculated to assure a reasonable diet for the patient and his or her family, is dependent upon the patient refraining from work and the receipt by the Department of Social Welfare of a satisfactory monthly progress report from the medical officer in charge of the case. Non-co-operation in the matter of treatment results in the immediate withdrawal of a patient's allowance.

The allowances under the Scheme current this year were:—

	Per month
	\$
Head of household, as (i) out-patient ..	45
(ii) in-patient ..	15*
Wife (and from July this year the first adult dependent relative)	25
Each dependant aged 16 years and over ..	15
Each dependant under the age of 16 years ..	12

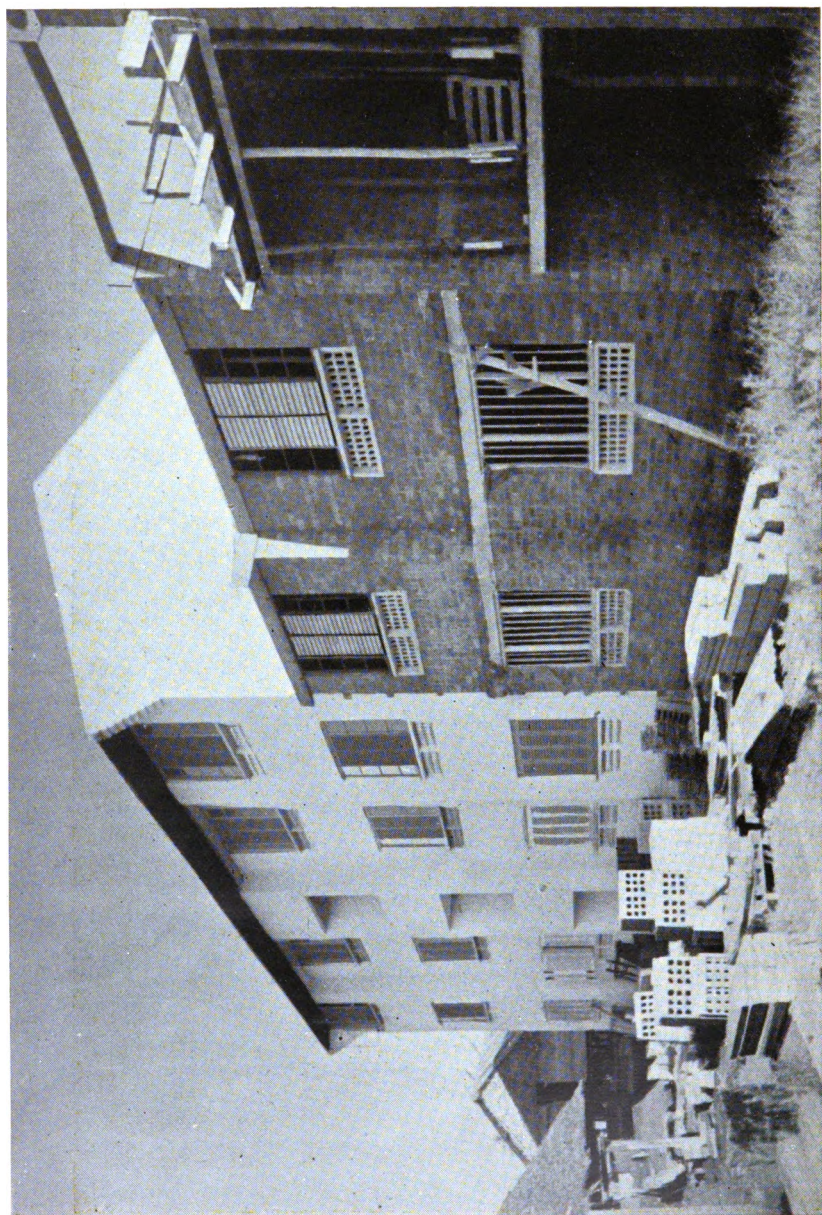
In addition, a 10 per cent cost of living allowance was payable on the above amounts together with an additional allowance equal to the actual rent paid by the family.

In cases where a wife, especially one with young children, has contracted tuberculosis and the income of her husband is insufficient to ensure an adequately nutritious diet for the family, she may also be considered for an allowance in her own

*\$5 per month in the case of a patient with no dependants.



Buying Clogs, water-colour painting by Margaret Tay (St. Andrew's School), aged 19 years



C. A. Gibson-Hill
Low-cost prototype flats built by the Singapore Improvement Trust at Norfolk Road (see Chapter VIII)

right under the T.B. Treatment Allowance Scheme. In such circumstances the allowance is calculated as for a head of household to which is added the actual rent paid by the family, the school fees and an allowance for domestic help, and a deduction made equal to the income of the family from all sources.

An average of nearly 1,000 payments per month were made under the Scheme and total expenditure was a little under \$900,000. The number of cases assisted this year was more than double that of 1951.

Silver Jubilee Fund

The Silver Jubilee Fund is a trust established from public subscriptions and, under the direction of a management committee, sums of approximately \$120,000 each year are disbursed by the Department for the relief of distress in Singapore. This money is largely used to supplement allowances paid under the Public Assistance Scheme. Old age, convalescent and confinement allowances are paid in suitable cases and the Fund is also used to meet the cost of educational and funeral expenses of persons in receipt of Public Assistance allowances or their dependants and for other special purposes.

Far Eastern Relief Fund

The Far Eastern Relief Fund for the relief of distress arising out of the Japanese occupation assisted an average of eighty families monthly. The Fund grants a war victim allowance to deserving families and also provides necessities such as clothing and cooking utensils. Twelve families are now living on the Far Eastern Relief Fund Farm at Kranji which was purchased in 1951 at a cost of \$50,000.

YOUTH WELFARE

Government's policy is to encourage voluntary effort in the improvement of existing youth organizations and in the provision of new facilities for youth. This encouragement extends to the giving of advice and, in suitable cases, financial assistance for development purposes. Such financial assistance is given in the

form of capital grants for the purchase of sports and other equipment and in monthly payments to some organizations for the salaries of club leaders and other staff.

All the established youth organizations in the Colony are affiliated to the Singapore Youth Council, which is an autonomous body free from Government control. The Council has no jurisdiction over the internal management of its member organizations. Subject to decisions at general meetings, the Council operates through an elected Executive Committee which meets monthly. Representatives from the Social Welfare and Education Departments serve in an *ex officio* capacity on the Executive Committee. The Government makes annual grants to the Youth Council to assist in meeting its running expenses. The activities of the Council this year included the organization of a Youth Week, the promotion of various competitions between youth organizations and the organization of training courses for youth leaders. Successive Executive Committees have done much to foster the objects of the Council which are, broadly, to promote the interest of youth movements and to ensure all possible assistance from the Government and the general public, to act as a liaison body between youth movements and to disseminate information regarding youth work in different parts of the world.

There are eight boys' clubs in Singapore with a membership of approximately 1,800 youths. The Federation of Boys' Clubs, which is affiliated to the Singapore Youth Council, has done much to improve the movement. It has sponsored individual clubs by raising funds on their behalf and is now planning to hold training courses in the more popular sports with coaching by experts. Perhaps one of the most important trends in boys' club work to-day is the gradual handing over of more and more responsibility to the boys themselves in the running of their clubs, while club leaders play an advisory role.

The number of boys and girls who are members of organized youth movements is still only a small fraction of the total number living in the Colony. If expansion is to be rapid enough to catch

up with the need for recreational and vocational facilities for boys and girls, many more suitable premises must be obtained, more and more training courses for youth and club leaders will have to be organized, and, above all, many more public-spirited men and women will have to be prepared to give up their spare time to work of this kind.

CHILDREN'S CENTRES AND COMMUNITY DEVELOPMENT

At the sixteen Children's Social Centres nearly 2,000 children receive an elementary instruction in class room subjects and lessons in cleanliness and hygiene, singing, drawing, carpentry and tailoring. Nursery classes are provided in a number of centres for children in the 3-6 years age-group. Each child receives a daily snack consisting of a vitaminized bun, a milk drink and fresh fruit. The Centres are staffed by voluntary workers and by paid staff from the Social Welfare Department, each Centre being under the charge of a lady voluntary worker known as a Centre Leader.

The plans for development envisage the gradual growth of Children's Centres into full Community Centres providing facilities not only for the present work but also for older boys' and girls' club work and for adult vocational and recreational facilities. The two new Centres constructed for the Department this year at Siglap and Serangoon were designed with such development in mind and can be regarded as the prototype of a series of such Centres. These new Centres are provided with spacious community halls capable of housing adult education classes, meetings of local bodies and any work of a cultural or recreational nature open to all members of the surrounding community as a residential unit. In this Centre work, the Department hopes to move in very close co-operation with the Rural District Committees, whose monthly meetings are frequently attended by members of the staff of the Department.

The Social Welfare Department is also experimenting in community development work in other directions. The cooking

and sewing classes organized in the buildings of the Pulau Tekong Boys' Club are an example of the Department's experimental contribution to village improvement and community development in the rural areas. The growth of independent Centres for community work in new housing estates in the urban areas has also been encouraged.

COURT PROBATION SERVICES

The development of the Probation Service in Singapore follows closely the pattern established in the United Kingdom. The Probation of Offenders Ordinance No. 27 of 1951 is based on the section on Probation of the Criminal Justice Act of 1948, modified to suit local conditions. This Ordinance extended the probation service to adult offenders. In March this year, a Probation Committee appointed by the Governor met for the first time. Two Case Committees, one for juveniles and one for adult offenders, were appointed, and from April met monthly to receive reports on the progress of probationers and to assist and advise probation officers in difficult cases.

The extent to which environmental factors combine to produce delinquency is convincingly shown by Probation Service records. In the period 1949-52, probation officers made reports on 413 juveniles found guilty of serious offences, of whom 280 were put on probation and 133 committed to Approved Schools. Of this total figure of 413 offenders:—

51 per cent were living in broken homes (i.e., homes with one or both natural parents missing), 6 per cent were not living at home, and 43 per cent were living with both natural parents;

51 per cent came from homes in which total household earnings averaged less than \$40 *per capita* per mensem, 16 per cent averaged from \$40-\$80, 6 per cent over \$80, and in 27 per cent of the cases, the figures could not be ascertained;

59 per cent came from badly overcrowded homes;

76 per cent were not attending school at the time they came before the Court.

Seventy-five juveniles and sixty adults were placed on probation during the year, and seventy juveniles and five adults ended their period of probation without further incidents. Most of the probationers were originally found guilty of offences against property. Thirteen cases, including three adults, failed to respond to probation treatment, but of these only two juveniles committed fresh offences; the other eleven cases were brought before the Courts for failure to co-operate with their probation officers and to observe the conditions laid down in their probation orders. The failure rate this year was rather less than 15 per cent.

THE CARE AND PROTECTION OF WOMEN AND CHILDREN

The work of the Women and Children's Section of the Social Welfare Department is directed towards the prevention of exploitation and ill-treatment of women and children by enforcement of the provisions of the Women and Girls Protection Ordinance and the Children and Young Persons Ordinance. To this end, raids on brothels and hotels are carried out in conjunction with the Civil and Services Police; inquiries are conducted into the circumstances of girls who are not living with their natural parents, especially where there is reason to suppose that guardians or employers are not providing humane treatment; women and girls entering the Colony are screened as a safeguard against their later use for prostitution; and investigations are carried out in cases of cruelty, followed up by prosecutions in serious cases.

The organization and effectiveness of anti-vice work has considerably improved. Raids have been intensified; the Anti-Vice Sub-Branch of the C.I.D. carried out 1,263 raids while officers of the Department carried out 433 raids. Although prostitution is not an offence, soliciting is open to prosecution, and the management of brothels and living on immoral earnings are very serious offences. The effect of these raids has been to discourage prostitution and to suppress establishments operating

as disorderly houses. The Department is particularly concerned with juvenile prostitutes under the age of 18, as these girls can be detained in a Home under the Women and Girls Protection Ordinance; seventy-six juvenile prostitutes were detained this year and sent for rehabilitation training at one or other of the Girls Homes. Overseas trafficking in women and girls has greatly declined since the war and is now almost non-existent.

Registration with the Department required by the Children and Young Persons Ordinance in respect of 'transferred children' within the Colony will, in time, prevent easy adoption of girls for immoral purposes. Up to the end of the year 1,549 girls were registered as 'transferred children' (i.e., female children under 14 years of age who are living apart from their natural parents or brother).

The Women and Girls Protection Ordinance and the Children and Young Persons Ordinance give the Protector powers to inquire into cases of ill-treatment of women and children and to remove to a place of safety any woman or child who has been subjected to ill-treatment. In the year, 174 cases of ill-treatment were reported to the Department and investigated; Court proceedings were instituted in respect of six cases resulting in three convictions and the committal of two persons to terms of imprisonment.

HOMES AND HOSTELS

Homes for Adults

The Nantina Home and Bushey Park Home, run by the Department, care for the aged and unemployable who can no longer look after themselves, destitutes awaiting repatriation, and the victims of fires and other disasters. About 260 persons are accommodated in barrack type accommodation in the Bushey Park Home with separate hutments for each sex; the Nantina Home provides somewhat superior accommodation for about 40 persons. These two institutions are run on communal lines with only a minimum paid staff. Residents do their own cooking,

washing and sewing. A small sum of pocket money is issued monthly, but those who work in the kitchens receive slightly more remuneration. A hospital assistant is attached to the Homes to look after the immediate needs of the sick. The 28 or so blind adults in the Homes are taught handicrafts, such as rattan making, and instruction in braille is given to selected pupils.

Probably the best Home for the aged in Singapore is the Thomson Road Home run by the Little Sisters of the Poor. This Home is set in most attractive surroundings and provides for between 200 and 300 residents of all races.

Homes for Children operated by the Social Welfare Department

The Gimson School for Boys, originally known as the Bukit Timah Home, is an Approved School for boys committed by the Juvenile Court for a period of 3 to 5 years. Boys between the ages of 10 and 16 years may be sent to the School, but no boy may be kept there after his 19th birthday. The School is organized on the lines of a boarding school, with a house system, and every endeavour has been made to avoid a prison-like atmosphere. Many of the minor routine duties of supervision are carried out by prefects chosen from amongst the boys. Instruction is given in carpentry, rattan work, tailoring, laundering, cooking and baking, vegetable and flower gardening, animal husbandry and care of poultry. There are also classes in elementary English, mathematics and general knowledge. On arrival, every boy is admitted to the lowest grade and only rises by hard work and good behaviour. An After-Care Officer, appointed during the year, supervises boys placed on parole and keeps in touch with all discharged boys and also with their employers. There are at present 132 boys in the School.

Perak House is an orphanage accommodating seventy boys between the ages of 6 and 14. The great majority of the boys attend Government schools. There is a Scout troop, and a Life Boys' team has recently been started by a member of the staff.

The Girls' Home, transferred during the year to Mount Emily, provides accommodation and rehabilitation training for girls discovered in brothels and detained under the Women and Girls Protection Ordinance. Most of the girls have been trained for prostitution from an early age and lack education of any sort at the time of their admission. Rehabilitation has therefore to be based on endless patience and unflagging enthusiasm on the part of the staff. Discipline is necessarily strict and aims at instilling in the girls a sense of law and order. Training consists of educational classes in English, Mandarin, arithmetic, general knowledge, and hygiene; practical training in needlework and embroidery up to a very high standard; cooking and general domestic work; gardening and the care of poultry. In addition, the girls attend dancing and singing classes given by voluntary workers; receive lessons on manners and deportment, and are taken on educational visits to places of interest in the City. There are at present 40 girls in the Home.

The Girls' Homecraft Centre, York Hill, provides accommodation and training for many types of young children and girls who need institutional care. The nursery section accommodates babies and small girls and boys up to 6 years of age and the homecraft section accommodates girls from 7 to 19 years of age. There are now 78 girls attending Government schools. Needlework and dressmaking, domestic science, gardening and poultry keeping are taught in the Home. Boys from the nursery section are transferred to Perak House on reaching their seventh birthday or earlier.

The New Market Children's Home is for mentally deficient children, accommodating boys up to 12 years and girls up to 16 years of age. The first six cases were admitted in November, this year. It is expected that another fifteen cases will be admitted early in 1953, after classification at the Mental Hospital. The number of children to be accommodated in this Home, owing to limited space, will not exceed thirty.

The Department operates two hostels which accommodate working boys on low wages and boys placed on probation by the Juvenile Court or discharged from the Gimson School for Boys. Most of the boys living in the hostels are in employment, but they nevertheless do all the cleaning of the hostel premises and share the duties involved in the preparation of meals. The two hostels will together accommodate about seventy boys.

The Department's two day nurseries dealt with an average of nearly 150 children each working day this year. The mothers of these children are in employment and normally pay a small daily fee towards maintenance costs. The older children are provided with two meals each day, whilst bottle fed children are given full cream milk.

Welfare Homes for Children operated by Private Agencies

The Salvation Army operate orphanages and approved homes for boys and girls and a residential creche for young children who have been abandoned by or have lost their parents. The Juvenile Court commits boys on remand and boys found guilty of offences to the Salvation Army Home for Boys in suitable cases. The Women and Children's Section of the Social Welfare Department makes use of the facilities available at the Women's Industrial Home from time to time in disposing of cases of girls who are in need of protection.

The Roman Catholic organizations have been most active in the provision of institutional accommodation for young orphans, for girls in need of care and protection and for handicapped children. The Catholic Homes are as well appointed and as satisfactorily staffed as any in Singapore. The St. Joseph's Trade School ('Boys' Town') caters for the same general type of boy as the Gimson School for Boys and the Salvation Army Home for Boys, but the channel of entry to Boys' Town is not normally through the Juvenile Court. It is impossible to praise too highly the work undertaken in the Catholic Homes for girls, in which

many hundreds of girls, who would otherwise drift on to the streets or at best lead most unhappy lives, are receiving an excellent moral, mental and physical training.

Among other welfare institutions in Singapore are the Rama-krishna Mission Home, catering largely for Indian orphans and the Red Cross Home for Crippled Children which will be opened early in 1953.

SOCIAL RESEARCH

Hopes entertained in 1951 that a major research programme would be started this year were not fulfilled owing to lack of funds. Useful experimental work on sampling procedures was continued and a number of small scale surveys were undertaken. These included:—

- (i) completion of the Pilot Survey of Illness started in December 1951;
- (ii) a Survey of Aged People on behalf of the Age of Retirement Committee;
- (iii) a Survey of Opium Addicts; and
- (iv) a Survey of Vegetable Marketing on behalf of the Market Investigating Team.



IX

Legislation

FORTY-FOUR ORDINANCES were enacted during the year 1952. One of these was the Supply Ordinance, thirty-one were amending Ordinances and eleven were new Ordinances. The following are the more important:—

The Municipal (Amendment) Ordinance, 1952

This Ordinance confers powers on the City Council to admit to be honorary freemen of the City of Singapore persons of distinction and persons who have rendered eminent service to the City.

The Immigration Ordinance, 1952

This Ordinance which consolidates the law relating to, and further regulates, immigration into the Colony will, when brought into force, replace the Aliens Ordinance (Chapter 90) and the Passengers Restriction Ordinance (Chapter 93) under which the control of immigration is for the most part at present exercised. It has been framed so as to ensure that there shall be no interference with the freedom of movement between the Colony and the Federation of Malaya as it is only on such a basis that an effective and practicable control of immigration into Malaya can be established.

The Malayan Royal Naval Volunteer Reserve Ordinance, 1952

This Ordinance establishes a Naval Volunteer Reserve for the whole of Malaya, similar to the force established in the Straits Settlements before the War by the Royal Naval Volunteer Reserve Ordinance (Chapter 100), which has now been repealed. The force raised under the repealed Ordinance has been transferred to the unified force and is now known as the Singapore Division of the Malayan Royal Naval Volunteer Reserve.

The Police Force (Amendment) Ordinance, 1952

The amendment effected by this Ordinance confers on the Commissioner of Police power to reduce a non-commissioned officer in rank, a power which he previously possessed only in the event of a conviction of a non-commissioned officer before a commanding officer for any of the offences specified in section 30 of the Ordinance. It is considered essential in the interests of the discipline and efficiency of the Police Force that the Commissioner of Police should have this power.

The Penal Code (Amendment) Ordinance, 1952

This Ordinance brings the penal law in the Colony relating to infanticide into line with the provisions of the Infanticide Act, 1938, of the United Kingdom. In future a woman who commits infanticide while the balance of her mind is disturbed by reason of her not having fully recovered from the effect of giving birth or by reason of the effect of lactation consequent upon the birth of a child will be chargeable not with murder but with culpable homicide not amounting to murder.

The Interpretation and General Clauses (Amendment) Ordinance, 1952

This Ordinance besides making a number of modifications to the existing law introduces new definitions of 'British Commonwealth', 'British Possession' and of the 'High Commissioner of the Federation of Malaya'.

The Stamp (Amendment) Ordinance, 1952

This Ordinance gives effect to the recommendations of the Finance Committee of the Legislative Council which proposed certain increases of duty on a number of instruments.

The Singapore Harbour Board Reserve Ordinance, 1952

This Ordinance makes provision for the constitution, organization and discipline of a non-combatant force to operate primarily in the Singapore Harbour Board area. Members of the Board will be enrolled as officers and men of the Reserve on a volunteer basis, who would on the outbreak of war continue to work in their peacetime employment, but as members of a disciplined military force.

The Distribution of German Enemy Property Ordinance, 1952

This Ordinance reproduces with appropriate modifications the United Kingdom legislation and thus provides that, for the purposes of distributing German enemy property which came during the War into custody through the operation of the Trading with the Enemy Ordinance, 1939, an administrator shall be appointed to whom will be transferred and in whom will be vested German enemy property to be distributed in accordance with a scheme to be made by Order to be laid before the Legislative Council.

The Malayan Naval Force (Change of Name) Ordinance, 1952

This Ordinance changes the name of the 'Malayan Naval Force' to 'Royal Malayan Navy'.

The Christian Marriage (Amendment) Ordinance, 1952

This Ordinance makes invalid marriages solemnized under the Christian Marriage Ordinance, 1940, if at the date of the marriage either party was under the age of sixteen years, unless such marriage was solemnized in accordance with a licence issued by a titular head of a Christian denomination.

The Civil Marriage (Amendment) Ordinance, 1952

The effect of this Ordinance is that no party under the age of sixteen may be married under the Civil Marriage Ordinance, 1940.

The Deportation (British Subjects) Ordinance, 1952

This Ordinance makes provision for the removal from the Colony of British subjects who do not belong to the Colony whose continued presence in the Colony is contrary to the public interest. Only convicted or undesirable British subjects who have been resident in the Colony for less than four years and destitute British subjects who have been resident in the Colony for less than one year are affected by the Ordinance. If such British subjects have resided in the Colony for any longer period then the approval of the Secretary of State is required before a deportation order may be made.

The Muslim (Titles and Construction) Ordinance, 1952

This Ordinance substitutes the word 'Muslim' or, as the context requires, 'Islam' in all Colony laws and was introduced at the request of the Muslim community.

The Adoption of Children (Amendment) Ordinance, 1952

The main object of this Ordinance was to bring the Colony's adoption law more in line with present day views on the subject which require that an adopted child should as far as possible be placed in the position of, and regarded as, the natural and lawful child of the adopter. Certain restrictions on adoption were also removed by this Ordinance.

The Widows' and Orphans' Pension (Amendment) Ordinance, 1952

The provisions of the Widows' and Orphans' Pension Ordinance (Chapter 79) have been extended by this Ordinance to cover officers serving on probation or on agreement. Special provisions regarding officers who have been transferred from Palestine are also made.

The Private Lotteries Ordinance, 1952

This Ordinance brings under control all private lotteries by prohibiting them except with the permission of the Financial Secretary and provides for the levy of a duty thereon.

The Mental Disorders Ordinance, 1952

This Ordinance brings the law relating to the care and treatment of mentally disordered persons up to date, the provisions for temporary treatment being of particular importance. Persons so treated will not be certified as of unsound mind unless they become chronically ill. This will be of great therapeutic value in borderline cases where patients have some insight into their own condition.

The Singapore Legislative Council Elections (Amendment No. 2) Ordinance, 1952, and the Municipal Elections (Amendment) Ordinance, 1952

These Ordinances enable the presiding officers appointed under the Singapore Legislative Council Elections Ordinance, 1947, and the Municipal Elections Ordinance, 1948, to require a voter to furnish evidence of his identity.

The Documents (Uniformity of Names) Ordinance, 1952

This Ordinance removes the difficulties that have arisen in practice by providing that by however many different names a man may choose to be known in his everyday activities, nevertheless in what may conveniently be described as official documents he shall as far as possible confine himself to the use of a single name.



X

Justice, Police and Prisons

JUSTICE

THE COURTS ORDINANCE (Chapter 10) provides for the following Courts for the administration of Civil and Criminal law:—

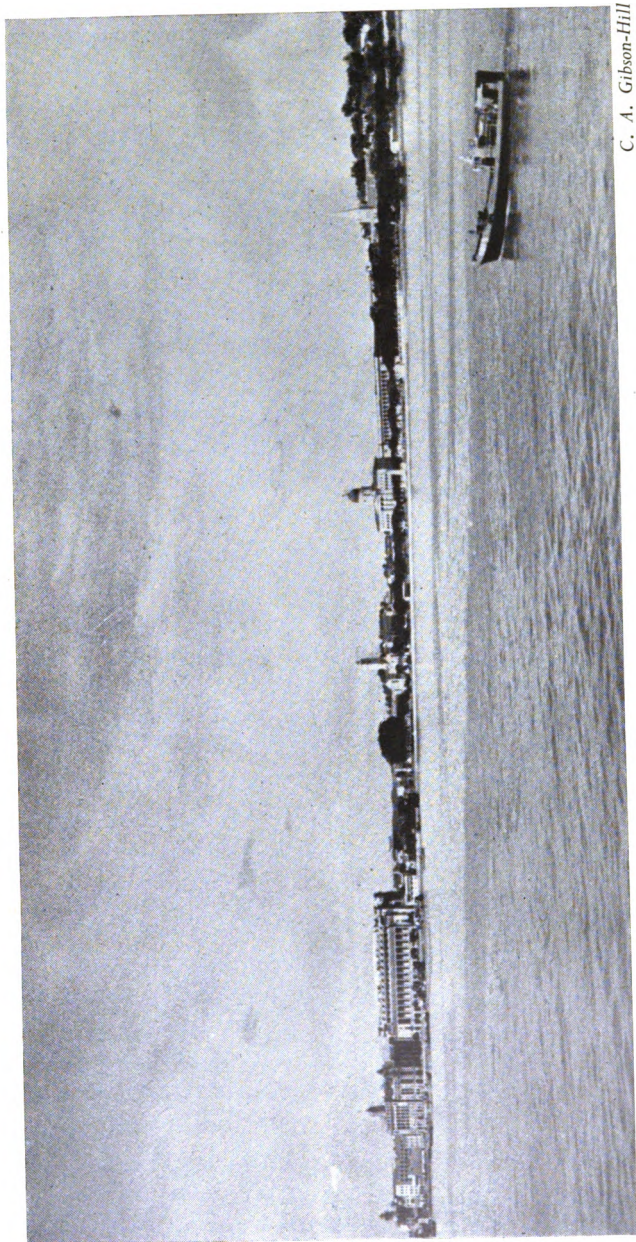
- (a) The Supreme Court;
- (b) District Courts;
- (c) Police Courts;
- (d) Coroner's Courts.

The Court of Criminal Appeal Ordinance (Chapter 11) provides for appeals from convictions had in trials at assizes.

The Supreme Court is composed of the Chief Justice and three or more Puisne Judges. It is a Court of Record, and consists of—

- (a) the High Court which exercises original criminal and civil jurisdiction, and appellate criminal and civil jurisdiction in cases tried in District and Police Courts; and
- (b) the Court of Appeal which exercises appellate civil jurisdiction in cases tried in the High Court.

An appeal lies from the Court of Appeal and the Court of Criminal Appeal to the Judicial Committee of the Privy Council.



C. A. Gibson-Hill

Singapore Water Front: This photograph was taken in 1952 from a point approximately where the artist was stationed to paint the picture reproduced at the frontispiece



C. A. Gibson-Hill

Sir Stamford Raffles looks down on Empress Place

Criminal trials at assizes are held every month before a judge sitting with a jury of seven persons.

At the beginning of the year there were three District Courts, four Police Courts, two Traffic Courts, a Juvenile Court and a City Police Court. On the 21st of January, a Relief Court was opened to deal with the increased number of cases. The new Court known as the City Police Court was formerly the Registrar of Vehicles' Court situated at Middle Road. It was taken over by the Judicial Department on the 2nd January, to deal with all City Council cases. With effect from 28th July, it was found necessary to allot to the City Police Court private summons cases of 'B' and 'C' Police Divisions, and arrest and summons cases under section 14 (a), (b) and (d) of the Minor Offences Ordinance (Chapter 24). This arrangement remained in force throughout the rest of the year. At the end of the year, therefore, there were three District Courts, four Police Courts, two Traffic Courts, the Juvenile Court, the City Police Court and the Relief Court.

Despite the good progress maintained in dealing with the number of cases arising during the year, there were two outstanding preliminary inquiries at the end of the year as compared with four at the end of 1951, while the number of outstanding cases was 2,395 as compared with 728 at the end of 1951. This increase of outstanding cases was due to the fact that 58,210 persons were brought before the Courts during the year as compared with 44,620 persons in the previous year.

The District Judge, Civil District Court, was also the President of the Compensation Board established under the Singapore Essential Regulations. An additional Civil District Court was maintained throughout the year.

The sittings of the Rent Conciliation Board established under the Control of Rent Ordinance, 1947, were held in the Civil District Court Building throughout the year and the Deputy Registrar of the Supreme Court officiated as President of the Board.

The Registry of the Court was in charge of the chief clerk who, in addition to performing the duties of chief clerk and the Registrar as required by the District Court Rules was also Registrar of the Compensation Board during the year.

All clerical work, as also that of interpreters, bailiffs, process servers and peons, required by these Boards was done by the staff of this Court.

There are also two Coroner's Courts; a coroner is appointed by the Governor either for the whole Colony or for a district thereof.

The Courts Ordinance also provides for the appointment of Justices of the Peace who, however, have no power to try cases.

The criminal procedure of the Colony is governed by the Criminal Procedure Code while civil procedure is governed by Rules of Court made under the Courts Ordinance.

The following is a comparative table of the principal processes dealt with by the Supreme Court during the past three years:—

	1950	1951	1952
Suits	1,144	1,052	1,701
Summonses-in-Chambers	928	864	997
Originating Summons	334	234	236
Petitions for Probate and Letters of Administration	661	581	632
Motions and Petitions	202	159	255
Bankruptcy Notices	105	113	135
Bankruptcy Petitions	111	110	80
Appeals from Magistrates	145	207	177
Appeals to Court of Criminal Appeals	24	24	20
Civil Appeals	31	12	29
Civil District Court Appeal	10	19	31
Admiralty Suits	—	—	6
Distress Warrants	25	11	14
Writs of Execution	183	158	244
Interpleader	8	3	7
Crown Suits	—	2	3
Divorce Petitions	47	30	43
Reciprocal Enforcement of Judgments	6	1	2
Writs of <i>Habeas Corpus</i>	—	1	2
Mandamus	—	—	—
Land Acquisition Reference	2	1	1
Companies Winding-up Petition	1	—	—
Adoption Petitions	12	11	19
Japanese Judgments	18	27	9

COURT OF CRIMINAL APPEAL
CRIMINAL APPEALS SHOWING RESULTS

NO. OF APPEALS		Appeals withdrawn	Appeals allowed	Dismissed without variation of conviction or sentence	Dismissed with substitution of conviction and/or variation of sentence	Retrial ordered	Appeals pending
Brought forward from 1951	1952						
6	16	2	2	12*	2	2	2

*The appeal of one of three appellants in one case was allowed and the appeals of two of six appellants in another case had their convictions and sentences varied.

HIGH COURT

CRIMINAL CASES DECIDED, TOTAL NUMBER OF PERSONS CHARGED

Number of cases	Number of persons charged	SEX		Chinese	Euro-peans	Eura-sians	Indians	Malays	Ceylon-ese	Filip-pinos	Iraqi	Others
		Male	Female									
75	107	105	2	76	8	1	16	6	..	..	..	..

HIGH COURT

CHARGES BROUGHT AND CONVICTIONS OR DISCHARGES RECORDED

Acquit- ted	Dis- charged	Con- victed	Retrial ordered	Remanded for obser- vation	Offences against the person	Offences against property	Offences relating to docu- ments	Offences under Unlawful Possession of Arms and Ammunition Ordinance 34/46	Offences under P.O. & S.P. 36/46 and Arms Offences Ordinance 37/47	Offences under Theft of Vehicle Ordinance 36/46	Offences under Finance Regulations	Miscel- laneous
63	1	78	1	3	37	50	33	10	4	..	..	9

CIVIL DISTRICT COURT

There was an increase in litigation compared with 1951, the total actions begun this year being 2,788 compared with 2,369 last year. The commonest types of litigation were:—

Landlord and tenant cases	517
Claims for money lent	1,330
Claims for goods sold and delivered ..	102
Claims for wages	168
Claims for work done	52
Claims for rent	14
Claims for dishonoured cheque	20
Claims for damages	31
Claims for amount due on document ..	89
Claims for income tax	407
Miscellaneous	58
	<hr/>
	2,788

CORONER'S COURTS

A total of 1,197 deaths was reported to the Coroner compared with 1,089 last year. Thirty-two inquests with jurors, and 773 inquiries without jurors were held during the year, and 1,011 post-mortem examinations were ordered. The following is a summary of the verdicts:—

1. Culpable homicide amounting to murder ..	10
2. Culpable homicide not amounting to murder ..	1
3. Causing death by rash act (motor vehicles) ..	22
4. Causing death by rash act (other than motor vehicles)	1
5. Open verdicts (motor vehicles)	5
6. Open verdicts (other causes)	27
7. Deaths by misadventure	289
8. Suicide	126
9. Found drowned	9
10. Judicial hanging	2
11. Found dead, cause unknown	19
12. Still-born; Premature birth	2
13. Tetanus Neonatorum	2
14. Criminal abortion	1
15. Death under anaesthetic	2
16. Deaths from injuries inflicted or received outside jurisdiction	11
17. Natural causes	571
18. Non-viable foetus	2
19. No verdict	1
20. Inquiries pending	94
	<hr/>
	1,197

PERSONS DEALT WITH FOR CRIMES AND OFFENCES
IN THE CRIMINAL DISTRICT AND POLICE COURTS, SINGAPORE, DURING THE YEAR 1952

	NUMBER			DISCHARGED		CONVICTED SUMMARILY									
	Grand Total	Male	Female	For want of prosecution	On the merits of the case	Committed for trial	Total	Imprisonment	Whipping and Imprisonment	Whipping only	Fine	Bound over or otherwise disposed of	Released on probation	Discharged conditionally	Discharged absolutely
1. Murder	25	25	..	..	5	20	..	..	..	..	..	..	..	..	..
2. Homicide not amounting to murder	103	61	42	..	14	..	89	5	..	..	4	4	9	67	..
3. Other offences or attempted offences against the person ..	3,548	3,315	233	54	1,105	77	2,312	698	1	..	1,288	72	38	74	141
4. Offences against property with violence or threat of injury, i.e. gang robbery and extortion ..	231	228	3	7	58	12	154	57	..	..	96	..	..	1	..
5. Housebreaking	106	103	3	2	35	1	68	61	..	..	1	..	6	..	..
Carried forward ..	4,013	3,732	281	63	1,217	110	2,623	821	1	..	1,389	76	53	142	141

PERSONS DEALT WITH FOR CRIMES AND OFFENCES

IN THE CRIMINAL DISTRICT AND POLICE COURTS, SINGAPORE, DURING THE YEAR 1952—continued

	NUMBER			DISCHARGED		CONVICTED SUMMARILY									
	Grand Total	Male	Female	For want of prosecution	On the merits of the case	Committed for trial	SENTENCED								
							Total	Imprisonment	Whipping and Imprisonment	Whipping only	Fine	Bound over or otherwise disposed of	Released on probation	Discharged conditionally	Discharged absolutely
Brought forward ..	4,013	3,732	281	63	1,217	110	2,623	821	1	..	1,389	76	53	142	141
6. All other offences, attempted offences against property ..	1,117	1,082	35	27	239	3	848	546	..	..	177	9	68	45	3
7. Offences against Municipal Ordinance and Revenue Laws, i.e. Chandu, Liquor and Tobacco ..	15,625	15,100	525	457	794	..	14,374	1,384	..	..	12,989	..	..	1	..
8. All other offences or attempted offences—seizable ..	14,470	14,271	199	18	568	..	13,884	30	..	..	13,846	2	1	1	4
9. All other offences or attempted offences—non-seizable ..	6,760	6,295	465	60	415	..	6,285	42	..	..	6,231	1	4	3	4
10. Traffic ..	16,225	16,201	24	20	814	..	15,391	14	..	..	15,364	..	9	..	4
Total ..	58,210	56,681	1,529	645	4,047	113	53,405	2,837	1	..	49,996	88	135	192	156

POLICE

THE EMERGENCY

A review of the course of the Emergency in Singapore during this year reveals a complete change in its character compared with previous years. The force of circumstance has led the Communists to abandon open defiance and to return to secret penetration. Police pressure and Party policy have both contributed to this change. As a result figures for open outrages have been no more than ten per cent of those for 1951 and public distribution of propaganda has been negligible, but there have been some merciless attacks against the authorities and those who have tried to aid them, so that although incidents have been few they have been serious.

One attempt which was fortunately unsuccessful was made to murder a Chief Inspector and a Detective Police Sergeant. Three men whom the Communists suspected of aiding the police were shot; two of them died from their wounds.

Home-made bombs were used in unsuccessful attempts to attack Servicemen in a hotel bar and to set fire to European-owned property. In one of these outrages a member of the public made a gallant attempt to apprehend the terrorists; he was himself subsequently attacked and seriously injured by Communist sympathizers. Most of these outrages were carried out in public and in daylight.

For these reasons, although conditions may appear on the surface to be returning to normal, the extra powers under the Emergency Regulations are vital.

In their campaign of peaceful underground penetration the Communists have not made any appreciable headway, but there have been signs of their activity in certain labour forces and in one Chinese school. They have also resumed publication of an underground monthly 'education paper' which has a limited

circulation, but which is intended to revive the weakened propaganda forces of the underground movement.

Police officers have waged a ceaseless underground campaign, and have extended their preventive measures to the rural areas and especially to the guarding of the Straits of Johore where it is important to frustrate any attempt to establish regular supply routes to the Communists in the Federation of Malaya. In this the closest liaison has been maintained with the Federation authorities.

Radio patrols have achieved effective results and further efforts have been made to gain the confidence of the public in the rural areas of the island.

Much effort has been spent in attempts to rehabilitate detainees. As many as possible have been released on Direction Orders which impose the minimum of irksome conditions. In other cases detainees who have applied to go to other countries have been permitted to leave Singapore. The total number of people in detention at the end of the year was the lowest since the beginning of the Emergency.

GENERAL REVIEW

Steady progress has been made throughout the year and steps have been taken not only to establish more efficient methods of training for new recruits, but also to give further adult education to long service members of the Force.

For many years successive Commissioners of Police in Singapore have recognized that there is an inherent difficulty in policing a predominantly Chinese populated city with a wholly Malay constabulary. In the past many attempts have been made to induce suitable Chinese recruits to join the Force, but for various reasons they have failed.

Throughout the year small numbers of Chinese recruits have come forward for service in the Reserve Unit where their training is carefully organized. In the Reserve Unit these Chinese

constables serve side by side with their Malay colleagues and it has been possible to build up a remarkably keen *esprit de corps* through close supervision and training.

It has been found that the Chinese constables have introduced their friends and relatives as recruits and this method of recruitment has proved much more effective than any large scale recruiting campaigns such as were tried in the past.

It is recognized that the task of increasing the Chinese element in the Police Force will take time and careful selection. On the 1st of November a training unit was set up in the Police Training School to give instruction to a nucleus of officers and N.C.Os. for the training of Chinese recruits during 1953.

This year the salaries of Inspectors and Chief Inspectors were substantially increased and approval was given for their entry into Part I of the recently introduced Higher Schemes of Service. The Inspectorate now offers an attractive career for suitably qualified candidates.

TRAINING

Six officers attended training courses at Ryton-On-Dunsmore in Warwickshire during the year. The value of these courses lies not only in the training but also in the close and friendly contacts which officers make with members of the British Police Forces and the insight which they gain into the relationship between the Police and the public in Britain.

BUILDINGS AND ACCOMMODATION

Lack of housing continues to affect recruiting and the welfare of the rank and file, but during the year plans have been approved for the building of houses of a much improved standard for police families. In future each new quarter built for a constable will have two bedrooms, a sitting room and kitchen. This improved housing is expected to have a marked effect upon recruiting and morale.

ESTABLISHMENTS AND STRENGTHS

Regular Police

The authorized establishment and actual strength of the Force on 31st December this year was as follows:—

			<i>Authorized</i>	<i>Actual</i>
Commissioner	..	..	1	1
Deputy Commissioner	..	..	1	1
Assistant Commissioners	..	..	5	5
Superintendents	..	..	13	13
Assistant Superintendents	..	..	91	81
Chief Inspectors	..	..	38	13
Inspectors and Probationary Inspectors	..	..	240	178
Sub-Inspectors	..	..	10	9
Staff Sergeants	..	..	48	34
Sergeants	..	..	178	166
Corporals	..	..	459	424
Lance Corporals	..	..	416	382
P. Cs.	..	..	2,410	1,921
Detective Special Grade	..	..	14	14
Detective Staff Sergeants	..	..	38	36
Detective Sergeants	..	..	51	51
Detective Corporals	..	..	146	124
Detective Police Constables	..	..	229	222
Total	..	..	4,388	3,675

Distribution by races was:—

<i>Nationality</i>	<i>Gazetted Officers</i>	<i>Inspectors</i>	<i>Uniform Branch</i>	<i>C.I.D.</i>	<i>Total</i>
European ..	77	1	—	—	78
Eurasian ..	5	28	11	14	58
Chinese ..	10	87	83	288	468
Ceylonese ..	3	13	—	2	18
Indian ..	3	32	103	45	183
Pakistani ..	1	4	66	11	82
Malay ..	2	18	2,433	70	2,523
Gurkha ..	—	8	232	—	240
Indonesian ..	—	—	13	7	20
Arab ..	—	—	—	3	3
Philippino ..	—	—	—	1	1
Vietnamese ..	—	—	—	1	1
Total ..	101	191	2,941	442	3,675

This Regular Force of 3,675 has to police a population of 1,077,155. The Special Constabulary numbered 1,577, so that the total police personnel exceeded 5,000, but it should be remembered that all the Special Constabulary and at least half the strength of the Marine Police, together with a large proportion of Divisional Police and Special Branch Officers, were employed exclusively on static guard duties and preventive internal security measures connected with the Emergency.

Crime

The decrease in serious crime recorded in the latter part of 1951 was maintained this year. While better preventive methods undoubtedly contributed to this decrease, the degree of successes achieved by the Police Force is in great measure a reflection of the mutual confidence between the Police and the public which is increasing steadily. A manifestation of this trend is the fact that in a number of cases of robbery and armed robbery, the victims effectively resisted criminals, and in other cases dialled '999' giving immediate information. There were also several cases when passers-by themselves took up the hue and cry and arrested the culprits. Public spirited action on the part of members of the public was recognized by the payment of a number of financial rewards. Despite these signs of progress there is much room in Singapore for improvement in the matter of co-operation between the Police and the public, and Police training and education continues to be directed towards this end.

The number of seizable offences known to the Police during the year was 10,327 of which more than 1,500 were discovered by the newly formed Anti-Narcotics Sub-Branch. House-breakings have fallen from 1,032 in 1951 to 884 and thefts from 5,325 to 3,970 and there was a similar decrease in robberies. The value of property stolen during the year, as estimated by the owners, was \$2,368,911 compared with \$3,335,379 in 1951. Property recovered during the year was \$271,954, or 11.5 per cent, compared with \$359,675, or 10.8 per cent, in 1951.

Narcotics

On the 1st of August, a branch of the C.I.D. was formed for the suppression of the illegal narcotic drug trade in the Colony. This task was formerly carried out by the Customs Department which continued to be responsible for the prevention of illicit importation of narcotic drugs.

Opium is the only illicit narcotic drug of any consequence in Singapore and the work of the Narcotics Branch, in conjunction with Divisional Police, is chiefly concerned with preventing

traffic in and the smoking of opium. Altogether 2,209 raids were carried out and 2,125 persons were charged before the Courts under the Dangerous Drugs Ordinance: 1,966 opium pipes, 1,977 lamps and 147 lb. of raw and prepared opium were seized.

Secret Societies

No significant change occurred this year either in the number of secret societies and gangs, or in the pattern of their activities. A few new organizations made their appearance and threatened to cause some increase in crime, but appropriate measures by C.I.D. officers were effective and there was no upsurge of activity. Yet the very existence of secret societies is a constant threat to the public's security and good order. The gravity of this threat was well illustrated by the fact that when secret society influences in the staff of a large public transport concern were eliminated, not only did relations between employees and management improve, but the daily revenue of the company increased considerably.

An interesting result of the activities of the Narcotics Branch has been the fact that many secret societies, who previously operated from opium dens, have been forced to close down and their members have become dispersed.

Commercial Crime

There have been many successful prosecutions for illegal commercial activities. Offences under the Finance Regulations were the subject of a large number of investigations. Other offences investigated concerned the Merchandise Marks and Trade Marks Ordinance, the Poisons Ordinance, Imports and Exports, Companies, Undesirable Publications, Medical Registration and Registration of Business Names and other Ordinances.

Other successful investigations were made into the counterfeiting of Indonesian currency notes. In one case counterfeitors were caught red handed producing 100-roepiah notes. They were found in possession of blocks for printing 1,000-roepiah notes and of counterfeited notes with a face value of 2,400,000 roepiahs.

Gaming

During the year 509 raids were carried out on premises suspected of being used for illegal lotteries as a result of which 276 cases involving 1,147 persons were taken to Court. Fines totalling \$72,342 were imposed and the face value of *Chap Ji Kee* documents seized was \$458,929 which is the highest figure ever recorded. There are now comparatively few known gaming houses in the Colony which can operate on a large scale, but promoters of illegal lotteries and games of chance have infiltrated into clubs, where they are more difficult to detect.

Thirty-one clubs were prosecuted and nine others were closed down in consequence of police action during the year.

Traffic

The Accidents Section, which comprises four teams, has been faced with ever increasing work.

Accident statistics are compiled monthly and a statistical summary for the first half of the year was produced.

At the end of the year the number of vehicles registered in Singapore was 207,084 of which 45,614 were mechanically propelled. These figures do not include Service vehicles of H.M. Forces.

As more vehicles come on to the roads they produce a constantly increasing traffic problem and heavier accident rates. The present accident figures are consistently high and show a distressing tendency to increase. To meet these increased traffic problems many new road signs, including automatic traffic lights, were set up, but since there are only 290 miles of roads in the Colony there is considerable congestion of traffic particularly in the business areas of the City.

An ever increasing demand for driving licences made it necessary to increase the staff of driving testers. An average of 110 tests a day were conducted, 50 per cent more than in 1951, yet the demand for Provisional Driving Licences for learner drivers continues to increase. There are approximately 28,000 holders of Provisional Driving Licences who have not yet passed the test.

SUMMARY OF SEIZABLE OFFENCES KNOWN TO THE POLICE IN 1952 WITH COMPARATIVE FIGURES
FOR 1951, 1950, 1949, 1948, 1947 AND 1946.

Offences	1952	1951	1950	1949	1948	1947	1946
Class I. Offences against the person ..	736	660	563	513	653	737	904
Class II. Offences against property with violence ..	1,322	1,578	1,447	1,191	1,793	3,082	2,887
Class III. Offences against property without violence ..	5,057	6,272	4,279	3,497	4,397	5,621	6,486
Class IV. Malicious injury to property ..	37	72	119	..	..	..	..
Class V. Forgery and offences against the currency ..	10	..	7	5	12	1	..
Class VI. Other seizeable offences ..	1,899	409	519	374	779	2,617	4,147
Class VII. Emergency Regulations, 1948 ..	1,266	1,639	1,126	852	315	..	..
Grand Total ..	10,327	10,630	8,060	6,432	7,949	12,058	14,424

SUMMARY OF SEIZABLE OFFENCES

	NUMBER OF REPORTS IN CURRENT YEAR			Convictions during current year in respect of cases pending in previous year	Total convictions obtained during current year	Cases pending trial in the current year
	True cases reported	In which arrest effected	Resulting in convictions			
Class I. Offences against the person ..	736	555	282	31	304	188
Class II. Offences against property with violence	1,322	230	105	16	121	62
Class III. Offences against property without violence	5,057	1,275	1,066	34	1,100	202
Class IV. Malicious injuries to property ..	37	9	2	2	4	1
Class V. Forgery and offences against the currency	10	7	3	..	3	1
Class VI. Other seizeable offences ..	1,899	1,828	1,658	8	1,666	84
Class VII. Emergency Regulations, 1948 ..	1,266	1,172	958	..	958	26
Grand Total ..	10,327	5,076	4,074	91	4,156	564

ALIENS REGISTERED

Alien Chinese and Indonesians are not required to register as aliens.

During the year 1,210 aliens reported their arrival, of whom 589 were in transit. The remaining 621 were registered as residents. Figures for 1951 were 632 and 681 respectively.

There were 1,847 alien residents in the Colony at the end of the year, a decrease of 58 from last year.

The following table shows their distribution by nationality:—

	Nationality		Male	Female
American	103	158
Anamite	21	16
Arab (Saudi)	8	5
Argentinian	1	—
Armenian	2	2
Austrian	2	3
Belgian	4	2
Burmese	3	4
Cuban	1	—
Czechoslovakian	12	6
Danish	33	15
Dutch	184	250
Egyptian	1	—
Estonian	3	2
Filippino	69	48
Finnish	—	5
Formosan	8	9
French	32	48
French Indian	272	14
Total	759	587

JUVENILE DELINQUENCY

In March, 1946, a Police Court was reserved for the hearing of cases involving juveniles under 16 years of age and in September, 1946, the Juvenile Court was transferred to the Social Welfare Department Building. An honorary Magistrate who is assisted by a panel of advisers presides over the Court.

Details of children and young persons brought before the Juvenile Court in 1952 are as follows:—

Found guilty	..	..	464
Acquitted	..	..	26
Discharged	..	..	26
Withdrawn	..	..	8
Adjourned <i>sine die</i> or transferred to Higher Court	..	..	48
Total	..	..	572

DISPOSAL OF CASES FOUND GUILTY

Types of Offences	Cautioned and Discharged		Fined		Bound Over		Released on Probation		Committed to Approved Schools or Remand Home		Committed to Youth Ordinance Section in Prison		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Offences against the person	6	..	3	1	5	..	7	2	1	..	..	..	22	3
Offences against property with violence or threat of injury	..	..	..	..	..	..	2	..	..	..	..	..	2	..
House-breaking	..	..	..	..	..	..	4	..	7	1	..	..	11	1
All other offences and attempted offences against property	2	..	7	1	1	1	43	3	30*	2	..	..	83	7
Vagrancy	1	..	..	..	..	..	1	..	9	..	..	..	11	..
Absconding	1	1	..	..	..	..	..	..	22	5	5	..	28	6
Minor offences, e.g., hawking, dutiable tobacco, etc.	26	8	193	36	1	..	12	1	10†	1	2	..	244	46
Total	36	9	203	38	7	1	69	6	79	9	7	..	401	63

*One case committed to care of fit person. †Including six cases committed to the Gimson School for Boys for breach of probation. One case managing an unlawful society. Two cases beyond parental control. One case in need of care and protection.

NATIONALITIES

	Males	Females
Chinese ..	403	59
Indian ..	57	—
Malays ..	46	7
Eurasians ..	—	1
Total ..	506	67

AGE GROUP

Age*	..	8	9	10	11	12	13	14	15	16	17	18	19	Total
Males ..	..	1	9	21	56	72	57	63	125	92	9	..	1	506
Females ..	..	..	1	4	7	9	10	12	16	8	..	..	..	67
Total ..	..	1	10	25	63	81	67	75	141	100	9	..	1	573

*Those over 16 years are boys who had been placed on probation or committed to institutions and were brought before the Court for breaches of probation or for absconding.

PRISONS

The Prisons in Singapore consist of the short sentence Local, Remand and Female Prisons at Pearl's Hill and the long term Convict Prison at Changi, which altogether provide accommodation for 2,217 offenders under normal conditions.

The following figures describe the prison population during the year:—

		<i>Pearl's Hill</i>	<i>Changi</i>
Daily average of male offenders	..	742	492
Daily average of female offenders	..	51	—
Highest number of offenders held on any one day	.. ..	1,052	612
Daily average of young offenders	..	32	—

The daily average prison population was 1,285. A total of 6,010 persons were received in prison, of whom 3,024 were short sentence, 164 long sentence, 2,670 for safe custody and 152 vagrants. Ninety-four young offenders were received in the young offenders' section.

The Prisons Department continued to be responsible for the administration of the Camp on St. John's Island used as a place of detention under the Emergency Regulations. The average daily number of detainees this year was 96 compared with 156 in 1951.

During the year steps were taken to implement the recommendations of the Singapore Prison Enquiry Committee, 1951.

Discipline and security were satisfactorily maintained in the prisons and the health of offenders was good. Corporal punishment (cane) was awarded to thirteen offenders for aggravated assault on fellow offenders and to one offender for aggravated assault on a prison officer. Five sentences of corporal punishment were inflicted by order of the Court as against two last year. Five persons condemned to death were received, two of whom were executed. Two men escaped on different dates from

Changi Prison Farm, where they were working under minimum security guards. Both were arrested by the Police shortly after escaping.

For breaches of the Dangerous Drugs Ordinance 1,512 persons were received for imprisonment. The majority were habitual opium smokers and with few exceptions were Chinese. Frequent instances occurred, of people asking to be admitted to prison without formality of warrant or trial. All said they were habitual opium smokers, wanting to rid themselves of the craving for opium and were prepared to enter prison voluntarily to obtain the treatment given to convicted opium addicts. They were not, of course, accepted.

Throughout the year full employment was found for all convicted offenders in carpentry, tailoring, shoe repair, blacksmithing, tinsmithing, printing, book-binding, laundry, vegetable gardening, pig and poultry farming, rope, fender and mat making. All suitable long sentence prisoners were given industrial training in useful trades. Handicraft classes in embroidery work, sewing and toy making were held during the evenings. Elementary education classes were held in Changi Prison for Chinese, Malays and Indians. Produce from the prison farm totalled 104,223 lb. of vegetables, 1,752 lb. of pork and 6,877 eggs. The offenders' earnings scheme continued to work successfully. This year \$8,801 (£1,026.15.8) was paid to offenders.

The rules for partial remission of sentence for good conduct in prison were amended in May. Rates are now one-third for long sentence and one-sixth for short sentence male offenders. For women, the rates are one-third for both long and short sentence offenders. Under the system whereby sentences of seven years and over are brought up for review at intervals of four years, or more frequently should the Governor desire, the sentences of seventy offenders were reviewed. The Governor granted special remission ranging from one month to one year to twenty-five men.

The work of spiritual ministration to offenders continued throughout the year. Visiting Imam held Friday prayer meetings for offenders of the Muslim faith, while clergy of the Roman Catholic and Anglican Churches conducted services for offenders of these religions. Valuable personal contact was afforded to offenders by the visits of members of the Society of St. Vincent de Paul and Toc H. Salvation Army officers in co-operation with the After-Care Association looked after the welfare of ex-offenders. Several hundred offenders were interviewed prior to discharge and work was found for a large number of them. Valuable welfare work was done in the Female Prison by a group of voluntary lady welfare workers.

Members of the Board of Visiting Justices paid monthly visits of inspection to the prisons, and Lady Visiting Justices made similar visits to the Female Prison. St. John's Island Detention Camp was visited monthly by members of the Board of Visitors.

The prison staff consists of a Commissioner and Superintendent, 6 chief officers, 45 principal officers, 2 chief warders, 31 warder corporals, 327 warders, 3 instructors, 1 school teacher, 7 female staff, 10 clerks and 21 office boys, gardeners, drivers, etc.

Two recommendations of the Report of the Prisons Enquiry Commission, 1948 were implemented by the introduction of good conduct pay and a special allowance of \$10 per month to corporal warders, warders and wardresses who pass an examination in the English language. The good conduct allowance of \$2 per month for each period of 3 years' service up to a maximum of \$6 per month, is pensionable and payable to the same category of the staff as the special language allowance.



XI

Public Utilities and Public Works

PUBLIC UTILITIES

ELECTRICITY

ELECTRICITY is produced and distributed in Singapore by the City Council. Originally, in 1906, it was purchased in bulk by the Municipal Commissioners from the Singapore Tramway Co., Ltd. In 1926, with the opening of the St. James Power Station, the Commissioners extended their activities to the generation of electrical current.

During the year, 216,004,280 units were generated, an increase of 7,364,820 units over 1951.

Nearly 184 million units were sold and produced revenue exceeding \$14½ million. The following summary shows the distribution of these figures:—

SUMMARY				Units	Amount
					\$
Lighting and Fans	..	..	..	44,810,400	7,516,003
Domestic Power	..	..	..	41,102,700	2,485,476
Industrial Power	..	..	..	96,381,500	4,409,026
Public Street Lighting (City Council)	..	..	..	1,465,900	159,355
Public Street Lighting (Rural)	..	..	..	74,600	14,883
Traffic Signals	..	..	..	67,600	11,009
				183,902,700	14,595,752

The first turbo-alternator of the new 150,000 Kw. Power Station at Pasir Panjang went into commercial operation on the 9th December and by the end of the year had generated 4,830,150 units. The rapid, successful commissioning of this machine was to a great extent due to the close co-operation of the contractors with the City Council.

St. James Power Station (capacity 37,000 Kws.) had an output of 211.2 million Kw. hours and a maximum demand of 35.5 megawatts which are a record for this Power Station. Interconnection of the first unit of the new Power Station (capacity 25,000 Kws.) with St. James was effected by the installation of two 12,500 K.V.A. Interconnection Transformers and Feeders.

Twenty-nine new sub-stations were completed and over 120 miles of various types of cables were laid. Street lighting in Singapore is rapidly being electrified and 4,341 street lights were installed at the end of the year.

The number of meters in service was 79,947, an increase of 8,540 over 1951. The number of consumers at the end of the year was 51,954 as compared with 47,420 in the previous year.

The supply of electrical energy for the centre of the City is direct current and the system of distribution is a 3-wire network of 460 volts across the outer and 230 volts outer to neutral. The supply for the outer areas of the City and in rural areas is alternating current and the system of distribution is 3 phase, 4-wire, 50 cycles at 400 volts between phases and 230 volts phase to neutral.

Special tariffs are available for both large lighting and power consumers but in general the cost per unit for lighting and fans is $17\frac{3}{4}$ cents and for domestic purposes 6 cents. Ordinary power rates are 6 cents for the first 5,000 units per month, $4\frac{3}{4}$ cents for the next 20,000 and $3\frac{1}{2}$ cents for the remainder. An attractive hiring scheme is operated by the City Council, whereby essential

domestic apparatus is available at a very low cost per month, e.g. hire of a ceiling fan with regulator is \$1 per month, a large cooker with kettle \$2 per month, and a large bath water heater \$2 per month.

GAS

The supply of gas to the City was in the hands of the Singapore Gas Co. from 1862 to 1901 when the then Municipal Commissioners (now the City Council) acquired the undertaking by purchase.

The production of and demand for gas continues to expand year by year and the total production this year amounted to 475,840,000 cubic feet, an increase of 52.5 million cubic feet.

The sales of gas to private consumers are the highest ever recorded in the history of this undertaking, with the number of private consumers increasing from 6,637 in 1951 to 8,608. The sales and fitting of appliances increased in proportion, and the year closed with an unfulfilled demand for gas and appliances.

The capacity of installed plant is approximately 1,700,000 cubic feet of gas per day.

The tariff for the sale of gas is as follows:—

- | | | |
|---|----|------------------------------------|
| (i) Outside City limits | .. | \$7 per 1,000 cu. ft. per month |
| (ii) Inside City limits— | | |
| (a) for consumption not exceeding 1,000 cu. ft. per month | .. | \$6 per 1,000 cu. ft. per month |
| (b) for consumption exceeding 1,000 cu. ft. per month but not exceeding 100,000 cu. ft. per month | .. | \$6.50 per 1,000 cu. ft. per month |
| exceeding 100,000 cu. ft. per month | .. | \$6.30 per 1,000 cu. ft. per month |
| exceeding 300,000 cu. ft. per month | .. | \$6.20 per 1,000 cu. ft. per month |

WATER

The original works for the supply of water to the City of Singapore were installed and maintained by the Straits Settlements Government. They were taken over by the then Municipal Commissioners in 1878 on the payment of compensation. Since that date the Waterworks have been developed and expanded and the City Council now maintains all the catchment, storage, treatment, filtration and pumping plants in Singapore and South Johore. The sources of supply are from catchment areas and impounding reservoirs.

The average daily consumption this year was 37,971,000 gallons with a maximum consumption of 43,196,000 gallons on the 4th October. The corresponding figures for 1951 were 35,629,000 gallons and 39,858,500 gallons respectively. The number of metered services continues to increase and at the end of the year was 48,975 (2,517 more than in 1951). In addition, 463 services exist which are not metered giving a total of 49,438 services in all.

The total rainfall for the year averaged over the catchment areas in Singapore and Johore was 122.20 inches compared with 113.44 inches in 1951. Mainlaying continues with increasing momentum and a total of 28.96 miles of mains were laid and 1.72 miles removed, bringing the total length of mains in use to 592.01 miles.

To increase the safe capacity of the Waterworks, a new Waterworks Scheme is in the course of construction.

The first development stage of this Waterworks was completed in December and the plant is expected to be ready for operation in the first days of January 1953. The work on the second stage is well advanced and plans are in hand for the third and final stage of development.

The City Council maintains a high standard of bacteriological and chemical purity for its water supplies and in spite of terrorist activity in some of the catchment areas, these standards have not been lowered.

Charges are made according to the consumption recorded by meters, at a tariff which varies according to the type of consumption. Details of the tariff, consumers and consumptions follow:—

FRESH AND SALT WATER CONSUMPTION AND NUMBER OF SERVICES 1952

Description	Tariff per 1,000 Gallons	Consumption Gallons	No. of Services
	\$ c.		
Clause 1—Shipping	2 50	366,164,172	18
Clause 2—Domestic—Inside City Limits ..	50	4,043,151,600	25,658
Clause 3—Domestic—Outside City Limits ..	85	430,909,460	3,465
Clause 4—Processed for sale ..	1 90	178,266,200	88
Clause 5—Industrial, Manufacture—not processed for sale	1 15	957,043,468	2,835
Clause 6—Catering, Hotels, Boarding Houses, Coffee Shops, etc.	1 00	2,683,451,218	14,768
Minimum charges per month	Various	7,746,200	973
Armed Services	68	1,924,104,800	107
Johore Government	25	550,135,800	4
Singapore Government	68	907,950,000	716
City Council	66	928,437,600	} 806
	Free	250,339,100	
Total, Fresh Water ..		13,227,699,618	..
City Council—Salt Water	39	134,015,000	..
Total ..		13,361,714,618	49,438

PUBLIC WORKS

STAFF

The shortage of qualified senior staff continued almost unabated throughout the year, and of thirty-three Division I appointments in the approved Establishment of the Public Works Department only twenty-four could be filled. Four pupil civil engineers of whom two are locally born were undergoing training by the Department, and another, also locally born is being trained in England by a well known firm of civil engineers after obtaining a Diploma in Civil Engineering at an English Technical College.

Frequent changes of senior staff added further to the Department's difficulties.

LABOUR

While there was no lack of unskilled labour, the shortage of skilled labour, particularly of building artizans, continued to hamper not only the Department's construction programme, but also construction works for the Services, and other public bodies. The unfortunate but inevitable result has been that to some extent the various public bodies compete for the same skilled labour.

Relations with labour and with the two unions of which most P.W.D. labourers are members, were at all times harmonious.

The affairs of the P.W.D. Co-operative Thrift and Loan Society continued to flourish, and the services of the honorary officers to their fellow members were greatly appreciated.

FINANCE

Despite staff shortages the Department spent nearly \$26½ million compared with approximately \$16 million last year.

The total turnover of the Stores Branch, which purchases common user stores for all Departments was \$3.41 million.

The expenditure of the Mechanical Branch, which maintains the majority of Government vehicles, plant, marine craft, and heavy earth moving equipment, was \$304,836, most of which was recoverable from P.W.D. votes and from other Departments' funds.

The total value of work executed for other Departments from non-P.W.D. funds amounted to \$1.37 million.

NEW BUILDINGS

The Department constructed eight schools and provided fencing, waterborne sanitation, playing fields and access roads at 15 others at a total cost of approximately \$1,654,000. It completed six other schools whose construction was begun last year. The total expenditure on works for the Education Plan was \$2.36 million.

Six rice storage godowns were constructed at a cost of \$504,000, and 160 quarters for Government officers of various categories and units of quarters for daily-paid labourers were completed at a cost of about \$1,000,000.

As part of the Singapore Medical Plan, a hostel for 250 probationer nurses and the Out-patients' Clinic and Blood Transfusion Wing were commenced, and the Base Medical Store completed during the year at the General Hospital.

Two Maternity and Child Welfare Clinics, commenced in 1951, were completed during the year. The total expenditure on works for the Medical Plan was \$1.55 million.

Additions and alterations costing \$140,000 to various Police Establishments and a new Vehicle Workshop for the Police costing \$93,000 were completed.

A camp for Volunteers was built at Changi, and 82 quarters for lepers at Woodbridge Hospital at a total cost of \$375,000.

Schemes to the total approximate value of \$15,000,000 were in the planning stage at the end of the year.

MARINE

The Department maintained a fleet of four dredges and 22 hopper barges, and carried out routine dredging in harbours and navigable rivers at a cost of \$461,000.

The Department maintained its own marine slipway and workshop, and carried out all but the heaviest overhauls itself.

The lighthouses, beacons and lights in the approaches to Singapore were kept in satisfactory repair throughout the year, and various sea-walls were improved.

AIRFIELDS

By almost non-stop maintenance, including a great deal of night work by flood light, the Civil Airport at Kallang was kept open without interruption to scheduled flights.

The chief cause of anxiety was the rapid deterioration of the Pierced Steel Plank laid in double layers over 'concrete' put

down by the Japanese during the occupation. During the year, and entirely at night, a length of 2,250 feet of runway, 150 feet wide, was improved by the removal of Pierced Steel Plank and the substitution of bitumen grouted macadam, at a cost of \$210,000.

The North-East taxi track, for some time closed to aircraft of the Constellation class, was reconstructed at a cost of \$62,000.

Two pre-fabricated aluminium buildings each 100' X 40' were erected at the Airport to improve the Customs, Immigration and Health examination facilities, and a Radio Beacon Hut was constructed as an aid to aircraft in periods of low visibility.

Construction work began during the year on the new International Airport at Paya Lebar. After many months of planning, surveying, soil sampling, test boring and soil testing, and despite very wet weather, 300,000 cubic yards of earth on the new runway alignment had been removed, spread and consolidated by the end of the year.

As an essential preliminary to this project, the occupants of the site, mainly small-holders, were removed to and resettled on a 350-acre site at Bedok, which had been surveyed and drained by the Department.

RESEARCH

The Department conducted research on the cathodic protection of submerged steel structures, with particular reference to the rapid deterioration in sea water of its fleet of steel dredgers and barges.

Laboratory and field experiments on the drainage of clay soils by electro-osmosis, particularly in areas reclaimed by dredgings were put in hand and were still in progress at the end of the year.

Many soil tests, plate bearing tests, California Bearing Ratio tests, and Cone Penetrometer tests were carried out in connection with the Paya Lebar Airport and the reconstruction of the North-East taxi track at the Civil Airport, Kallang.

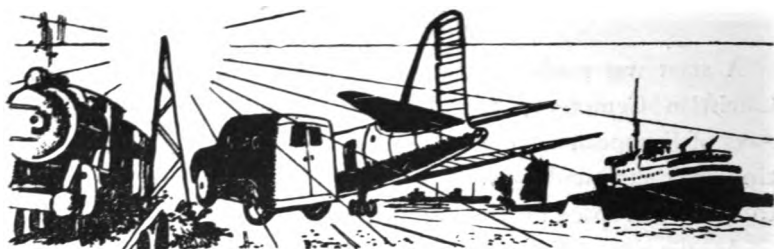
HISTORIC SITES

A start was made on the removal of headstones at the Old Christian Cemetery, Fort Canning—dating from the earliest days of European settlement in Singapore—and their incorporation in a surrounding wall, preparatory to converting the area into an open space for the use of the public.

At the same time the approaches to the East Gate were restored.

GENERAL

Building materials became more readily available during the year, and despite the continuance of the Korean War, and of disturbances in Indo-China and Malaya, prices showed a tendency to ease towards the end of the year. There is no doubt that the control of luxury building in Singapore has played a part in this downward movement. The *ad hoc* method of planning the Department's annual construction programme was abandoned this year, and a 5-year programme related to the Department's probable spending capacity was worked out.



XII

Communications

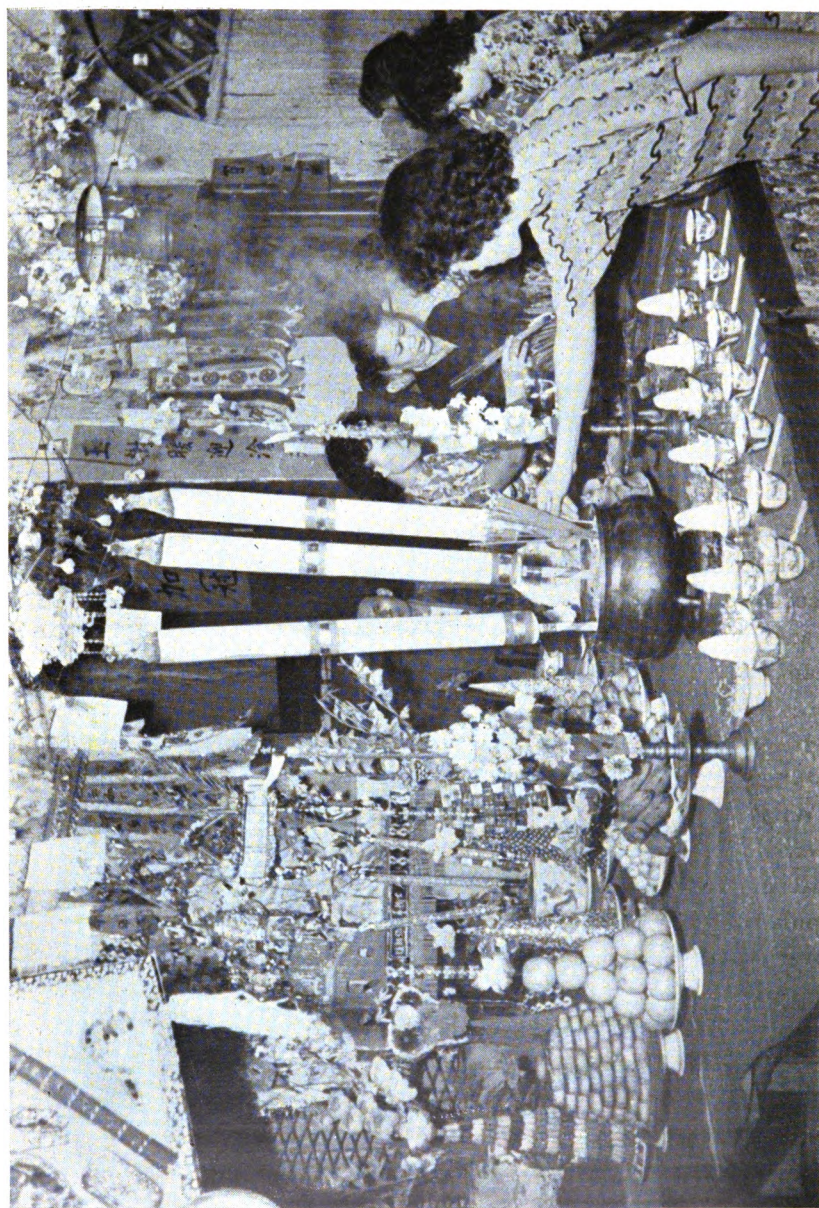
SHIPPING

HISTORICAL

THE GEOGRAPHICAL position of Singapore, half way between India and China, makes the port a suitable stopping place for passenger and cargo liners plying on the main route from East to West. It is also a most convenient centre for local ships trading in South-East Asia and the East Indies. Foreseeing the possibilities Sir Stamford Raffles set out to make it as attractive as possible by providing that 'The Port of Singapore is a *Free Port* and the trade thereof is open to ships and vessels of every nation free of duty, equally and alike to all'. Ships soon began to turn into its harbour. In 1820 Raffles appointed Captain W. Flint to be Master Attendant in charge of the port and the ships in it. There have been 18 successors to that post; their duties have increased and become more clearly defined but still include a number of functions usually carried out by Customs and Harbour authorities in other places. As head of the Marine Department with a staff of 255 the Master Attendant is responsible for the registration of ships and for numerous other matters connected with the movement of ships, the provision of crews, and the safety of navigation in the waters of the Colony.



Kelong (Fish Trap), water-colour painting by T. Y. Choy, Art Master
St. Joseph's Institution



The altar set up to celebrate a popular Chinese festival held on the seventh day of the seventh moon and much observed by women

C. A. Gibson-Hill

Until 1850 cargoes were worked in the Singapore River which is shallow and subject to constant silting. In that year the Peninsular & Oriental Steam Navigation Company took advantage of the deep water which had been charted by Admiral Sir Harry Keppel just off Tanjong Pagar and built wharves on the waterfront there. Other shipowners followed suit, the Singapore River became known as the Old Harbour and the waters at Tanjong Pagar as the New Harbour, later Keppel Harbour. In 1869 the newly formed Tanjong Pagar Dock Company acquired seventy-four acres of the best sites with the intention of developing the New Harbour on a common user basis. In the same year the Suez Canal was opened and it became economical to replace sailing ships in the Far Eastern trade with steamships: these larger vessels could be accommodated at the Dock Company's new premises. It was a convenient port *en route* so that in the next three years the annual tonnage of ships which called almost doubled itself. The Dock Company developed its facilities accordingly with the result that Singapore became established as an obvious meeting place where the cargoes of large ocean steamships could be transhipped to small vessels trading amongst the islands. The timely development and subsequent continuous improvement of the waterfront has been largely responsible for maintaining Singapore as a major port of the world.

With increased shipping it became necessary to impose controls to ensure the use of the port in the best interests not only of the local merchant community but also of the rapidly growing population and of the newly opened peninsula of Malaya. The Government accordingly expropriated the Dock Company in 1905 at \$762 per \$100 share and established in its stead the Tanjong Pagar Dock Board with Mr. J. R. Nicholson as its chairman. This became the Singapore Harbour Board in 1913. The members of the Board are appointed by the Governor and comprise a permanent chairman and deputy chairman, and representatives of the Government and of the shipping and merchant community. The Board's premises now extend to 700

acres with over $2\frac{1}{2}$ miles of wharves and total capital assets of some \$124 million which are administered on a non-profit-making basis. Certain controls over the Board's working are exercised by Government in matters affecting the community as a whole but the Board is responsible for the satisfactory administration and financial solvency of its undertaking.

Cargo working outside the Harbour Board area has nevertheless continued to expand: quays in the city area are quite satisfactory for shallow draught vessels. Many sailing junks still ply a trade in local produce and a high proportion of steamships in the roads are worked by lighters which berth at the public quays. These have now grown to $7\frac{1}{2}$ miles in length and are maintained by the Public Works Department. Telok Ayer Basin used mainly for lighters was built by 1932 as part of a reclamation project. It has a water area of $20\frac{1}{2}$ acres and nearly a mile and a quarter of quays. It is operated by the Singapore Harbour Board as agent for the Government and produced a revenue of \$340,000 this year. A tendency to congestion has required slightly more rigorous rules to be made for its use during the year.

In 1861 Mr. William Wilkinson was appointed Government Marine Surveyor under the Master Attendant primarily for measuring the tonnages of ships. With subsequent great technical advances in the design of ships and increasingly rigorous safety requirements it became necessary to provide more extensive survey facilities. Staff was progressively increased until in 1912 the Government Surveyor became Surveyor-General of Ships and 12 years later was placed in charge of a separate Marine Surveys Department capable of surveying ships of all kinds and empowered to issue internationally valid certificates for all purposes. Only two British Colonies have these full facilities. Eight surveyors are employed under the Surveyor-General. In addition to survey work in the port the Department is also responsible for examining engineer candidates for certificates

of competency, for the technical aspects of maintaining 103 Government owned vessels and for supervising the design, construction and repair in Singapore of vessels owned by the Colony and other Governments. During the year the Surveyor-General of Ships supervised survey work in Penang.

The existence of survey facilities has made the establishment of ship building and repair undertakings particularly convenient. The principal undertaking was by the Tanjong Pagar Dock Company which opened the first graving dock, the Victoria Dock, in 1869. This with its associated dockyard passed to the Tanjong Pagar Dock Board in 1905 in the transaction mentioned above.

SHIPS

British ships are registered under the Merchant Shipping Act, 1894, and foreign owned ships are licensed under the Colony Merchant Shipping Ordinance. The reason for licensing the latter category of ship is to enable owners who are not British subjects or British registered companies to obtain some kind of recognition and at the same time remain under a satisfactory control. The survey requirements for licensed ships are less onerous than for registered British ships.

SHIPS REGISTERED AND LICENSED AT SINGAPORE ON 31ST DECEMBER, 1952

	No. of Ships	Tonnage
<i>British Ships:</i>		
Permanent Registry	260	65,393 net
Terminable Registry (under section 90 of the Act)	86	1,644 net
<i>Licensed Ships:</i>		
Sailing ships (not exceeding 200 gross tons each)	452	30,808 net
Cargo boats (not exceeding 100 gross tons each)	2,561	53,395 gross
Passenger boats (not exceeding 100 gross tons each)	342	586 gross
Fishing vessels (no limit of size)	2,630	not measured in all cases.

The entrance, clearance and movement in port of all ships is a matter for the Master Attendant under whose guidance a complete revision of the Port Rules and various other navigation regulations was begun during the year.

Eighty-three ships of the Royal Navy and fifty-seven warships and fleet auxiliaries of other nations visited the port.

MOVEMENT OF MERCHANT SHIPS IN 1952

		<i>Entered</i>	<i>Cleared</i>	<i>Total Tonnage (Millions of tons gross; entry and clearance counted as separate transactions).</i>
Foreign-going ships over 75 tons	..	4,077	4,064	33.93
Home-trade ships over 75 tons	..	1,787	1,758	4.63
Local-trade ships over 75 tons	..	2,190	2,173	2.16
Ships under 75 tons and native craft of all tonnages	.. ..	18,412	19,406	1.61
Powered fishing vessels	..	5,679	5,835	.09
Total	..	32,145	33,236	42.42

Mention has already been made of the longstanding connection of P. & O. with the Colony. This company was the first to have the Government mail contract and it held it continuously until the abolition of the contract system. There are now scores of shipowners of many flags maintaining frequent passenger and cargo services with North and South America via the Suez Canal and the Pacific, with West and South Africa, Australia, Europe, Ceylon, India, Hong Kong, and Japan. Singapore agencies cover most of the important shipping lines and have a secretariat for the Far East Freight Conference. Singapore is the headquarters of several other local shipping conferences including the Straits-New York, Straits-Pacific, British Malaya-North Canada, Straits-Australia, Straits-Calcutta and the Malaya-China-Japan conferences. Of Singapore shipowners the Straits Steamship Company

founded in 1890 is the largest and with its associates owns sixty-three ships. A number of local shipowners maintain services with numerous ports in the Federation of Malaya, Burma, Borneo, Indo-China, Indonesia, the Philippines, Sarawak, Thailand and other places in the East Indies.

CREWS

The Master Attendant as Shipping Master maintains a Shipping Office where crews are signed on and off the Articles of ships in accordance with various international conventions and domestic statutes relating to the employment of seamen. There are approximately 6,000 Singapore seamen at sea. The Shipping Office is also responsible for ensuring that ships are sufficiently manned under the law with certificated officers and for various other matters incidental to the clearance of ships from port and the transit of seafarers. Thirty distressed British seamen were received during the year and repatriated or found employment. Desertions of Singapore seamen in other ports, a matter for some concern, are recorded in this Office.

SHIPPING OFFICE

				1952
Articles opened	..	..	..	515
<i>Seamen signed on:</i>				
European	..	..	..	1,055
Asian	..	..	..	18,189
<i>Seamen signed off:</i>				
European	..	..	..	1,154
Asian	..	..	..	18,023

As Registrar of Seamen the Master Attendant maintains a specialized type of labour exchange for Asian seafarers known as the Seamen's Registration Bureau. This was established in 1949 in an attempt to reduce the impositions to which seamen in port are subject. In this it has been largely successful though some improvements remain to be made.

SEAMEN'S REGISTRATION BUREAU

		<i>Number on the Register excluding those untrace- able on 31st December</i>		<i>Number found employment</i>
		1951	1952	1952
Chinese	.. ..	11,288	11,576	5,187
Malay	.. ..	3,801	3,861	3,157
Other	.. ..	939	977	300
Total		16,028	16,414	8,644

Complete facilities for the examination of all types of Merchant Navy officers for certificates of competency are maintained. Those certificates which have international validity are issued in the name of the Governor and there are arrangements with the Ministry of Transport in the United Kingdom for ensuring strict uniformity between Colony certificates and those issued elsewhere in the Commonwealth.

EXAMINATION OF DECK AND ENGINEER OFFICERS

		<i>Examinations conducted</i>	<i>Certificates issued</i>
		1952	1952
<i>Internationally valid certificates:</i>			
Foreign-going Masters and Mates	.. ..	2	—
Engineers	.. ..	51	7
<i>Local certificates:</i>			
Deck grades	.. ..	766	262
Engine Room grades	.. ..	394	287

In addition eighty-eight lifeboatmen were examined, of whom sixty-nine passed.

A Nautical School was established during the year to provide facilities for local men to qualify themselves for the higher grades of certificate. Hitherto it has been necessary for candidates for these certificates to study in the United Kingdom or elsewhere. The problems of providing the apprenticeship facilities necessary for the complete training of Merchant Navy officers were investigated during the year.

The welfare of seafarers was a matter of concern as long ago as 1850 and since that date a number of sailors' homes and other charitable institutions has been established. There is no central charitable committee as such but the Singapore Mercantile Marine Fund Committee, a statutory body, is in so commanding a financial position that it can guide welfare activities satisfactorily. During the year, it entered into the following principal financial commitments:—

	\$
Nautical School	20,460
Sailors' homes, charitable institutions and missions	67,737
Relief to aged seafarers and their dependants ..	104,454

There are three unions of Merchant Navy officers and five of Merchant Navy seamen. The oldest of these was established (though not technically as a trade union) in 1880.

SAFETY

The basis of the Colony rules for loadline and safety requirements is in the Merchant Shipping Acts, and Rules of the United Kingdom; these in turn are founded on international conventions of 1929 and 1930. A further Safety Convention in 1948 revised and extended the earlier provisions and much work was done this year in Singapore towards bringing the local law up-to-date. Apart from these world-wide requirements, there are two international agreements of more local validity: the Simla Rules of 1931 which apply to ships carrying unberthed passengers between Ceylon, Hong Kong, India, Indonesia and Singapore and a set of agreements with Thailand, Indonesia and Indo-China made in 1935 at the instance of the Straits Settlements Government applying to all ships trading between those countries. During the year, much headway was made towards a similar agreement with Burma. Great Britain has always taken a leading part in promoting high international standards of safety at sea; this maritime Colony takes a similar lead in South-East Asia.

The rules for the construction and survey of ships are highly technical and complex and are very nearly uniform throughout all important maritime states. Surveys in the Colony are mainly undertaken by the Marine Surveys Department and vary in extent from an examination of some minor component to an exhaustive inspection of the entire structure and equipment of a ship in dry dock and afloat. High standards are maintained by a combination of periodical surveys according to law, by the insistence of underwriters and in some cases by the efforts of shipowners.

SHIP SURVEYS AND INSPECTIONS, 1952

	<i>Singapore</i>	<i>Penang</i>
Certificates of Survey for Tonnage ..	200	50
Passenger and Safety Certificates (all classes) ..	59	16
Loadline Certificates (all classes) ..	131	28
Life Saving Appliances (all classes) ..	161	32
Minor Surveys and Inspections ..	7,732	240

The Master Attendant is generally responsible for navigational aids. The first lighthouse was built in 1850 at Pedra Branca, 36 miles East of Singapore and since then one harbour light and three more seaward lights have been established. The Director of Public Works is responsible for maintaining their structure and the Director of Telecommunications for maintaining the wireless equipment by which they communicate with the Port Office. There are in addition 48 beacons of which 15 are lit and 34 navigational buoys of which 11 are lit; lights were installed in two more beacons near the Pulau Bukom oil installation during the year. Sixteen local Notices to Mariners, 85 Shipping Circulars and numerous wireless broadcasts notifying dangers were put out. The British Coast Radio Station VPW is maintained in Singapore by the Director of Telecommunications. It is used to receive distress messages as well as for broadcasts and in this year received 14,446 private paid messages from ships of all flags and sent 12,293 messages out. The Director of Telecommunications is also responsible for examining and licensing ships' radio

operators and ships' wireless stations. During the year 40 Ship Station Licences were issued. Under the International Safety Convention certain ships are required to possess International Wireless Telegraphy Certificates which are issued by the Surveyor-General of Ships with the assistance of officers of the Telecommunications Department. During the year 128 such certificates were issued.

Pilotage is not compulsory in Singapore but is much used by Masters owing to the difficulties of navigating the approaches. The Singapore Pilot Association handled 11,639 ships this year.

A total of 58 shipping casualties were reported under the Merchant Shipping Ordinance during the year. Most of these were trivial but four were sufficiently serious to justify preliminary enquiry and in three cases formal Courts of Investigation were ordered.

Some progress in the salvaging of wrecks was made at Tanjong Rhu and Siglap and agreements for the salvaging of the *Empress of Asia*, *Sirdhana* and *Oscar II* were made. A sum of \$395,000 was distributed in the year by the Master Attendant as Receiver of Wreck in respect of goods which had come into his hands. The Singapore Harbour Board's salvage tugs *Griper*, *Mitra* and *Tarek* were called out six times for rescue operations. There were seven fires and one explosion in the port during the year. Detailed investigations into fire fighting facilities were carried out with a view to their improvement.

THE HARBOUR

The table on next page shows the amount of cargo which entered and left the Colony by sea this year. Attempts should not be made from these figures to deduce net imports or exports of the Colony as the port serves the mainland of the Federation of Malaya and part of the inward cargo is later exported on transshipment.

CARGO HANDLED IN 1952

(In thousands of tons)

	In ships over 75 net register tons		In ships under 75 net tons and in all native craft		Total
	Inward	Outward	Inward	Outward	
At Harbour Board premises including Telok Ayer Basin ..	2,588	1,639	2	—	4,229
Outside Harbour Board's premises mainly by ships in the roads ..	2,151	702	469	305	3,627
At rural area landing places ..	—	—	35	12	47
Total ..	4,739	2,341	506	317	7,903

Passenger arrivals in the year were 61,533 and departures were 63,162.

The Harbour Board owns seven berthing and salvage tugs. During the year these handled 6,409 ships in port. The twin screw diesel electric tug *Skillful* was acquired and after some repair and adaptation was commissioned on 19th August this year. In its first month of service it attended 173 vessels.

The existing 2½ miles of wharves were further extended by the construction of 10 jetties of a total length of 1,000 feet on the North Wall of Empire Dock and 4 sheds altogether of 45,000 square feet were added to the existing 39½ acres of enclosed storage space. These new facilities were used from March this year, for a new scheme to speed up transshipment operations; ocean carriers discharge to these new sheds for on-carriage by coasters to some 26 ports. The new jetties also serve for the discharge of lighter cargoes. In extension of this scheme two sheds were assigned for transshipment traffic to and from North Borneo and Sarawak as the regular carriers in this trade are of too great a draught for accommodation at the North Wall. Other works completed by the Board during the year include the construction of a ramp for the discharge of cargoes from the bows of L.S.Ts., an extension of palm oil berthing facilities,

the construction of one small warehouse of 14,600 square feet and the renovation and partial reconstruction of three old warehouses. During the year 300,000 square feet of uncovered hardstandings were built.

In pursuance of the Harbour Board's policy of increasing the mechanical aids for cargo handling there were acquired during the year a further twelve fork lift trucks, two mobile cranes with long jibs, thirty-six tracking trailers and three tractors. This gear has greatly accelerated the turnaround of ships and reduced damage to cargo caused by unnecessary physical handling. In addition a semi-trailer lorry unit was purchased in February this year, and a further unit with its trailers in May. These have been found most useful in the transference of small consignments from one part of the wharves to another. A new diesel locomotive commissioned in November is used mainly for shunting operations between the Harbour Board area and the Malayan Railway yards.

Considerable planning work was accomplished by the Board's Civil Engineering Department in co-operation with the Singapore Improvement Trust and other authorities; the object is to provide for the general development of the Tanjong Pagar area of the port with a satisfactory link between the Shenton Way development, the Main Wharf area and the proposed East Lagoon development. General site explorations for future wharf extensions were also undertaken and borings and samples subjected to laboratory tests. Work was begun in the year and progress made in strengthening the Main Wharf at Keppel Harbour to allow for a new 10-ton travelling portal crane now in the course of erection.

The labour engaged by the Board in stevedoring and like services amounted to some 8,300 men engaged either directly or on contract. They are distributed amongst three trade unions.

In October this year, a scheme was introduced whereby shippers could remove cargoes from the relatively expensive storage space in the transit sheds and keep them at a cheap rate

in warehouses specially set aside for the purpose. The system of issuing Delivery Lists was also amended during the year for their greater security and the Board's liability in respect of undeclared valuable cargo was increased from \$1,000 to \$2,000 per package as from 19th September this year. Some preliminary work was done towards a complete revision of the Board's Scale of Rates.

During the year the Public Works Department continued with the routine maintenance of the quays in the City area outside the Board's limits and recovered 334,000 cubic yards of dredgings from their surroundings. No dues are charged for the use of these quays; cargo is manhandled. Some 1,600 lighters and similar vessels entirely in private ownership are operated in the Colony and keep over 3,300 lightermen and stevedores in employment. The innumerable firms of small ship and junk owners, lighterers and stevedores congregated in the neighbourhood of the quays continue to flourish with the traditional methods common in Eastern ports and form an extremely intricate but highly flexible commercial organization.

There are no port facilities worthy of the name in the rural area though there are a number of publicly and privately owned jetties used by small ships trading with Johore and neighbouring islands.

Some 2,300 small vessels of all kinds are kept at these places and perhaps 250 men are employed in the stevedoring of fish, vegetables, firewood, stone and other items of local merchandise. During the year increasing efforts have been made to control vessels at these numerous out-of-the-way landing places to ensure that they were not being used for the supply of terrorists in Johore.

Coal bunkering has been carried on since 1869 by three firms which amalgamated their coaling interests in 1946 into a single agency. Coal is put aboard either by lighter from the coal yards in Kallang Basin or from hoppers at the Singapore Harbour Board's wharves. A total of 32,445 tons was supplied this year. The Harbour Board's inward coal handling facilities were

improved during the year by the laying of a new spur line alongside the coal plant so that railway trucks might be loaded direct from a chute. The rate of delivery has increased considerably as a result. The principal oiling station is at the small island of Bukom at the Western entrance to the harbour and there are other oiling stations at the island of Sebarok and at the Singapore Harbour Board's premises. Oiling is also carried out by bunkering lighters in the roads and two new vessels for this purpose were commissioned in 1952. This year 1,292,000 tons of bunker fuel were supplied. Watering is carried out by the Harbour Board at its wharves and in other parts of the port is in the hands of a local firm established in 1863. These supplied 2.3 million tons of water to ships in port during the year. A large number of firms are engaged in providing ships' stores and chandlery of all kinds. It is estimated that \$16.3 million worth of stores were supplied this year compared with \$13.6 million worth in 1951.

The policing of the waters of the Colony is undertaken by the Marine Division of the Singapore Police Force. This Division is responsible for enforcing the now comprehensive regulations relating to clearance, port health and so forth in the congested area of the port proper. The rules governing the use of other parts of the waters are kept extremely simple and for some years have amounted to little more than a night curfew intended to hinder the movement of supplies to terrorists in Johore. A large amount of cargo is transhipped each year between ships in the roads. Quite apart from the normal handling of inward and outward cargo the consequent handling of goods into and out of lighters presents many opportunities to petty thieves. Pilfering is, therefore, an ever-present danger. During the year 46 reports of thefts were made. This is a great improvement on 1951 when 64 reports were made. For their work the Marine Police have 46 powered launches and have begun the acquisition of a further 15 small powered boats during the year.

On land the prevention of pilferage is part of the normal duty of the Colony Police Force but in its premises the Singapore

Harbour Board is authorized to enroll its own Police Force which is limited to 288 all ranks. The Harbour Board Police Force is trained and works in close collaboration with the Colony Police Force and its special duty is to enforce the Board's By-laws and to prevent pilfering. It is also responsible in the same way as any other police force for the prevention of crime. During the year improvements were made in conditions of service notably by the provision of pensions for the rank and file.

SHIP BUILDING AND REPAIR

The largest shipbuilding and repair organization in the Colony is H.M. Dockyard at Seletar. This employs some 8,500 men.

Of the civilian undertakings, the Singapore Harbour Board's Dockyard is by far the largest and has very complete workshops. Continuing the trend of recent years, all dockyard facilities were extended this year and the necessity for additional dry dock accommodation was emphasized by demands for accommodation that could not be met.

The largest of the Board's five graving docks can take ships up to 850 feet in length and during the year one of the coal-fired boilers at its pumping station was rebuilt for oil fuel burning and equipment installed for its operation on recovered tank sludge oil. The completion of the new Cable Depot by Cable & Wireless, Ltd., freed the major part of the land required for a sixth graving dock and during the year considerable progress was made in preliminary work towards its construction. Apart from dry-docking facilities the Board maintains five slip and launching ways and work was begun on a new fitting-out berth which is to comprise a 600-foot jetty with a travelling electric crane weighing 150 tons. Novel methods of construction are being used on this project which was designed by the Board's Civil Engineering Department and which involves much ancillary work in dredging, reclamation and monsoon drain diversion. Plant was also installed for the recovery and filtration of used lubricating oil.

Approximately 5,711,000 tons of shipping was docked and 171 vessels were slipped during the year in the Board's dockyard. The greater volume of work was the normal periodic overhaul of tankers and dry cargo vessels but in addition the reconstruction of the fire-damaged tanker *Dromus* of 8,046 gross tons was completed. A new water boat of 213 gross tons was built and delivered to owners. Work on the construction of a self-propelled buoy and piling pontoon to the order of the Government of North Borneo proceeded. The tug *Tolong* was converted, in the Board's dockyards, from single screw to twin screw with controllable pitch propellers and resumed duty at the wharves in July this year. Supply of all materials improved towards the end of the year, and steel became available from sources other than the United Kingdom.

The Board maintains an electric power station and the completion of a new 3,000 Kw. turbo-alternator helped to reduce the burden on the City Council's station by generating 98 per cent of the Board's total requirements for the first half of this year. This figure was reduced to 76 per cent when the City Council assumed responsibility for the Board's night load in July. The total electrical energy distributed from the Board's station this year amounted to 9,412,422 kilowatt hours exceeding the 1951 figure by 2.1 per cent. Progress was made on the conversion of the dockyard electrical distribution system from overhead to underground cables.

A tentative ten-year plan was prepared for new accommodation for the Board's employees. As part of this:—

- (a) an additional forty labourers' flats were provided at Tanjong Pagar;
- (b) quarters for approximately 300 employees of dockyard contractors were constructed at Keppel Harbour;
- (c) two blocks of flats were erected at Low Hill for accommodation of married Police personnel.

The Board's dockyard employs over 1,000 men belonging to three trade unions. There was a serious shortage of certain classes of skilled labour during the year, particularly ironworkers and carpenters. This shortage of manpower is reflected in the difficulty found in achieving a rapid turnround of vessels under repair. It also aggravated the overdemand for drydock accommodation and put the Board at a serious disadvantage when quoting for work offered for competitive tender. As from 1st February this year, the Board introduced a sick pay leave scheme for its daily rated employees with a maximum entitlement of 42 days paid sick leave in a calendar year. The wages and salaries of the Board's staff were revised from 1st May this year, by consolidating part of the present cost of living allowances with basic salaries: this results in higher retirement benefits.

In addition to the undertakings at H.M. Dockyard and at the Harbour Board's dockyard there are over 23 private firms employing approximately 600 men engaged in shipbuilding and repair. These firms own six slipways capable of taking vessels of 100 to 500 gross tons and in addition own innumerable smaller slipways. Most of the work is in the routine maintenance of launches and junks but some 41 large craft were built in the year. This figure does not include small pleasure craft, fishing boats and the like. It is estimated that repairs and routine maintenance on slipways to over a thousand vessels of all classes were carried out. Apart from this there are a large number of junks repaired on the beach.

GENERAL

The port of Singapore compares very roughly with Glasgow or Manchester. It is by far the largest port in South-East Asia. The figures quoted above show that the working, building and repairing of ships provide employment for over 22,000 or 17 per cent of the Colony's workmen, still a far greater number than those employed in any other similarly wide group of occupations. That figure does not include the crews of ships nor



C. A. Gibson-Hill

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C. A. Gibson-Hill

A Johore Racing Kolek at the New Year's Day Regatta



Public Relations

The G.O.C. watches S.W.A.C. (V) members carrying out an aircraft plotting exercise in the A.A. Operations Room

administrative nor clerical staff. Like all small densely populated islands Singapore must place great reliance on her trade by sea and resist any interference with the free movement of ships in and out.

RAILWAYS

The Singapore Railway was constructed by the Colonial Government in 1903, and ran from Tank Road to Woodlands, afterwards being extended to Tanjong Pagar and Pasir Panjang. This railway was purchased and merged with the Federated Malay States Railways in 1913. A passenger and goods wagon ferry service operated across the Straits of Johore until the 3,442-foot long Causeway connecting the mainland with the Island of Singapore was opened in 1923.

The length of the running line (main line only) in Singapore Island is 15 miles 62 chains 21 links, and there are four railway stations; Singapore, Tanglin, Bukit Timah and Kranji. Passenger trains do not stop at Kranji; Tanglin is opened for purpose of train operating only.

The following table gives statistics of passengers and freight:—

PASSENGERS ENTRAINING AT SINGAPORE AND BUKIT TIMAH FOR THE
FEDERATION OF MALAYA

<i>Class</i>	<i>No. of passengers</i>	<i>Average miles travelled per passenger</i>
First Class	4,323	221
Second Class	29,162	233
Third Class	77,766	212
Total	111,251	..

GOODS TRAFFIC

	<i>Tonnage</i>
Forwarded from Singapore to Federation ..	205,590
Forwarded from Federation to Singapore ..	189,244
Total	394,834

ROADS AND VEHICLES

ROADS

The Public Works Department maintained a length of 223.5 miles of road at a cost of \$441,175. Fourteen miles of roads were reconstructed at a cost of \$389,985 and $2\frac{1}{7}$ miles of new roads were constructed at a cost of \$296,235. The City Council maintained 173.14 miles of roads and streets at an approximate cost of \$4,331 a mile. Important improvements made during the year were the completion of the second section of the dual carriage way named Shenton Way on the Telok Ayer Reclamation which now extends as far as Palmer Road. Several stretches of road were widened and construction of a dual carriage way on MacPherson Road was started to deal with the heavier traffic expected in this area when the new International Airport is completed.

VEHICLES

During the year 27,895 private motor cars, 493 omnibuses, 1,652 taxis, 6,354 motor cycles and 8,807 goods vehicles were registered. Twenty-six private and 5,093 public trishaws and 147,124 bicycles were licensed; 7,203 new motor vehicles were registered. The greatest increase was in February when 1,188 new vehicles were registered. This figure fell by the end of the year to the normal monthly increase of 475. One public and 13 private bus companies registered 85 new public transport vehicles. Despite this increase the public transport service is inadequate to deal with the demand and overcrowding particularly at rush hours continues. The great increase in the number of vehicles has aggravated problems of traffic control and parking and has resulted in a continued increase in accidents, despite many experiments in the provision of traffic dividers, roundabouts, pedestrian refuges and the inauguration of several new one-way streets.

CIVIL AVIATION

The volume of air traffic passing through Kallang Airport continues to show a steady increase. During the year there were 5,896 aircraft landings, an increase of 23 per cent over last year. The amount of air mail and freight handled averaged 120 tons per week, whilst the total number of passenger arrivals and departures exceeded 145,000. These figures represent increases of 20 per cent and 7 per cent respectively over the figures for last year.

Air services on the major international routes were operated by the British Overseas Airways Corporation and Qantas Empire Airways between the United Kingdom and Australia, by the Royal Dutch Airlines between Europe and Indonesia, and by Pan-American Airways between Singapore and the United States via the Philippines. The national airlines of Ceylon, Hong Kong, India, Indonesia and Thailand maintained regular services to Singapore whilst Malayan Airways, Ltd. further increased their local services to the Federation of Malaya, North Borneo and Sarawak.

The continued increase in air traffic placed a very heavy strain on Kallang, as a result of which in January the Public Works Department commenced the task of relaying 2,100 feet of the runway. To allow this work to continue at the greatest possible speed, the Airport was closed to all aircraft from dawn to dusk. Work on the runway was finally completed in September when a 24-hour service was resumed.

In June, two temporary buildings were erected in the terminal area, one for use as offices of the major airline operating companies, and the other to provide a second Customs, Health and Immigration examination area to cope with the increased traffic. This has allowed complete segregation of arriving and departing passengers, thus minimizing difficulties and delays to passengers. In addition, an Air Traffic Enquiry Bureau manned by the Department of Civil Aviation has been provided in the main

waiting hall of the Terminal Building to deal with air service and general enquiries, and a special private lounge has been constructed for use by important passengers.

Plans for the building of the new International Airport at Paya Lebar are well advanced and proceeding satisfactorily. The Governor appointed a committee composed of Government Officials and Unofficials representing the airline companies and the commercial community to advise on the construction of this Airport. A firm start has been made and construction is progressing rapidly. The main runway, which will be 8,000 feet in length, has been designed to meet all foreseeable requirements and, should the need ever arise, will be capable of further extension.

The capital cost of this new Airport will be considerable but is essential if Singapore is to retain its leading position as the focal point and junction for the air transport network of South-East Asia which is of vital importance to the Colony's economic future.

The following tables give statistical information about airport facilities, air services, passengers and freight:—

Number of Airports and Fields		..	1
Facilities available:			
<i>Name</i>	..	..	Kallang (V.SSG).
<i>Position</i>	..	..	01° 18' N. 103° 53' E.
<i>Elevation</i>	..	..	13 feet.
<i>Communications</i>			
Telephone	..	..	Singapore 3701/3.
Telegram	..	..	'Aircivil' Singapore.
<i>Runway</i>			
QDM	..	..	06-24.
Dimensions	..	..	6,000 × 165 feet.
Surface	..	..	PSP 06 end, Bitness on concrete at centre, metalled 24 end.
Suitability	..	..	Up to Constellation aircraft standards.
Grass Strip	..	..	Light aircraft grass strip 2,000 × 120 feet, parallel to and North of the main runway.
<i>Hours of Operation</i>	..	..	Continuous.

Facilities

Aeradio	..	..	Normal facilities available.
Met.	..	..	Full facilities available 24 hours.
A.T.C.	..	..	Available 24 hours.
Lighting	..	..	Obstructions, electric runway flarepath and taxi track. (See Notice to Airmen No. 32 of 1950 for full details).
Fuel	..	..	Available 24 hours.
Customs, Health, Immigration	..	..	Full facilities available during hours of operation.

INTERNATIONAL SERVICES WITH FREQUENCY OF SERVICES

KALLANG AIRPORT, SINGAPORE

<i>Route</i>	<i>Frequency</i>		<i>Airline</i>	<i>Total for the year</i>
Sydney/London	..	Fortnightly, twice weekly, thrice weekly	.. QEA/BOAC	596
U.K./Sydney	..	Once weekly, twice fortnightly, fortnightly	.. QEA/BOAC	240
London/Singapore	..	Twice weekly, weekly	.. BOAC	67
Hongkong/Singapore	..	Twice weekly	.. BOAC	111
Djakarta/Amsterdam	..	Weekly	.. KLM	156
Amsterdam/Djakarta	..	Weekly	.. KLM	157
Amsterdam/Sydney	..	Monthly	.. KLM	26
Hongkong/Bangkok/Singapore	..	Twice weekly	.. CPA	96
Hongkong/Saigon/Singapore	..	Weekly	.. CPA	52
Bangkok/Singapore	..	Weekly	.. Siamese Airways	59
Manila/Singapore	..	Weekly	.. PAA	53
Calcutta/Bangkok/Singapore	..	Weekly	.. Bharat Airways	53
Calcutta/Bangkok/Singapore/Sydney	..	Fortnightly	.. Bharat Airways	38
Colombo/Singapore	..	Fortnightly	.. Air Ceylon	26
Sydney/Colombo	..	Fortnightly	.. Air Ceylon	25
Colombo/Sydney	..	Fortnightly	.. Air Ceylon	25
Djakarta/Singapore	..	Weekly	.. Garuda Indonesian Airways	286
External	..	Four times weekly, twice weekly	MAL	642
Non-scheduled	..	Special flights	.. —	218
Non-scheduled	..	Light aircraft	.. —	5,490
				<hr/> 8,416 <hr/>

INTERNAL SERVICES WITH FREQUENCY OF SERVICES

Domestic	..	..	Daily	..	..	MAL	2,088
Domestic	..	..	Daily	..	..	Tr: Eastern Ltd.	575
Domestic	..	..	Thrice weekly	..	..	FAS	308
							<hr/> 2,971 <hr/>

AIR TRANSPORT TRAFFIC STATISTICS, 1952

KALLANG AIRPORT, SINGAPORE

		<i>Traffic</i>			
<i>Description</i>		<i>Arrival</i>	<i>Departure</i>	<i>Transit</i>	<i>Total Number</i>
Passengers	..	66,380	64,403	14,691	145,474
Mail	..	396,695 kilos	424,208 kilos	531,127 kilos	1,352,030 kilos
Freight	..	1,168,148 kilos	2,918,313 kilos	382,005 kilos	4,468,466 kilos
Number of civil aircraft engaged on internal services					.. 19
Number of arrivals of civil aircraft from outside territory					2,712
Number of airfields					.. .. . 1

POSTS

The Postal Services Department in the Colony under the local control of a Director of Posts is part of the Pan-Malayan Postal organization with its headquarters in Kuala Lumpur, Federation of Malaya, presided over by the Postmaster-General Malaya, who is responsible for the control of postal communications throughout Malaya.

The building up of the organization of the Postal Services Department to keep abreast of the ever-increasing demands made upon it proceeded satisfactorily during the year. Continued efforts were made to provide improved postal facilities within the means at the disposal of the Department, and to increase the efficiency of established services. The solution to the problem of handling large volumes of mails in the existing premises lies in the increased use of mechanical aids.

Apart from the main General Post Office building, in which all the administrative, accounting and sorting work is carried

out, there are twenty-two Post Offices and seven Postal Agencies. These include a Post Office on Christmas Island and an Agency on Cocos Island—both over one thousand miles away. Two new features were introduced during the year in order to make postal facilities more readily available to the public. A mobile Post Office now tours the rural areas, and a portable Post Office is available for erection at important events, conferences and trade fairs.

The year was marked by a greatly increased number of transactions being made over Post Office counters, and experiments have been made with a 'team working' scheme. Under this system, instead of each separate class of business being conducted by a separate clerk, some classes are grouped together and a team of counter clerks is provided to carry out all the business within the group. By this means, one clerk can, if necessary, complete several different transactions for the same customer, so distributing the load of work at the counter and reducing queues.

Air conveyance continues to be of mounting significance, and Singapore is particularly fortunate in its placing along the international air routes. Every advantage has been taken of this, and air mail postal facilities have kept in line with aviation progress. A transit mail office was opened at Kallang Airport to facilitate the despatch and receipt of mails, and late collections have been introduced in order to connect with specific air services. In October the inaugural flight of the B.O.A.C. Comet service was made, and, by the end of the year, a regular twice-weekly service was in operation. It is now possible for letters to be delivered in London within 48 hours of posting in Singapore. Another innovation was the introduction in September of an air link between Singapore and Cocos Island, with connections to and from Australia, Mauritius and South Africa.

The acceptance of air mail as the standard mode of conveyance of first class mail has naturally had repercussions on some types

of surface traffic, but the despatch of parcels, packets, and newspapers has continued to increase. It is well known that, for 20 cents, a surface letter can be despatched to any country in the world, but this is perhaps accepted without a thought for the organization which is necessary to bring this about. In October, every postal administration in the world collected details of the amount of mail it handled for other administrations. Over the course of the next year these details will be analysed and will form the basis of payments to be made between administrations for the next three years. The controlling body, the Universal Postal Union, held a Congress in Brussels during the year, which was attended by a representative from Malaya.

In order to maintain the popularity of the Savings Bank, a special 'Savings Week' was held, and publicity by radio, posters, leaflets and the press was undertaken. The most important development in this connection was the Students Savings Scheme which was introduced in September. Under this scheme facilities are afforded to all students to save small amounts of money weekly, so as to form a habit of thrift. The teachers sell 10-cent, 50-cent and one dollar stamps which are affixed to a card held by the student. On completion of the card, the amount saved is accepted at any Post Office as a deposit in the Savings Bank. For the benefit of the ordinary depositor, some modifications in the Rules of the Bank were introduced, the most important of which was the increase from \$50 to \$100 of the amount which may be withdrawn on demand.

The staff played a willing and important part in all these developments which were marred only by a strike of members of the uniformed staff which took place from the 13th to the 25th May as the result of the failure of salary negotiations.

TELECOMMUNICATIONS

TELEPHONES AND TELEGRAPHS

The local telephone service has been operated by a limited company under licence from the Government since 1905. In 1951 the Government notified the company that it would

exercise its option under the terms of the licence to take over the undertaking at the end of 1954, whereafter the telephone service will be operated by a statutory board.

The main exchange in the centre of the City is linked with six satellite exchanges. The number of exchange lines in service was over 14,000 with approximately 8,500 extensions, through which the daily average number of calls approximates 300,000. An additional 3,500 lines through the central exchange will be installed in 1953.

The trunk telephone and telegraph services between Singapore and the Federation of Malaya are provided by the Telecommunications Department on carrier telephone and voice frequency telegraph systems operating over open wire circuits. One 12-channel carrier system which was brought into use during the year, increased the trunk circuits between Singapore and the Federation of Malaya to a total of 44. For emergency purposes, a 4-channel carrier system, working over V.H.F. radio, was brought into use between Singapore and Kuala Lumpur. A further increase in trunk circuits will be provided next year when the new V.H.F. multi-channel radio equipment goes into operation.

The public teleprinter service between Singapore and the principal towns in the Federation of Malaya continues to be popular and will be extended when extra trunk circuits and V.F.T. equipment become available next year.

RADIO SERVICES

The overseas radio/telephone service provided by the Telecommunications Department to the United Kingdom, Hong Kong and Australia operated satisfactorily throughout the year, and a total of 145 calls were handled to the United Kingdom alone over the three days 23rd, 24th and 25th December. The service was extended to include North Borneo during the year, and successful tests were carried out with San Francisco.

High frequency wireless telegraph circuits are provided by the Telecommunications Department to the Federation of

Malaya, Sarawak, Brunei, Christmas Island and Thailand. Other external telegraph services are operated by Cable & Wireless Ltd., on a world-wide basis.

The Telecommunications Department also provides the international ship to shore service on medium and high frequency, which is augmented by a short range radio telephone service for local coasting vessels, and all communications in connection with international and domestic air services and meteorological requirements. These include:—

- (a) point to point twenty-four hour services to Colombo, Calcutta, Saigon, Rangoon, Bangkok, Djakarta, Darwin, Manila, Jesselton, Kuching, Labuan and Cocos Island;
- (b) two separate point to point circuits covering all airports and airfields in the Federation of Malaya;
- (c) Two air/ground/air wireless telegraph links and a long and short range radio telephone link, all twenty-four hours per day. These are guard services for the safety of aircraft in flight;
- (d) a medium frequency beacon and a responder beacon in the 200 Mc/s band, in continuous operation;
- (e) a V.H.F. D/F service available throughout the twenty-four hours;
- (f) five receivers operated continuously for the collection of synoptic reports;
- (g) broadcast synoptic reports on two high frequencies;
- (h) sub-area broadcasts to aircraft on two high frequencies.

Local V.H.F. networks are provided for the following Departments:—

Master Attendant

This scheme links four lighthouses and three launches with the head office.

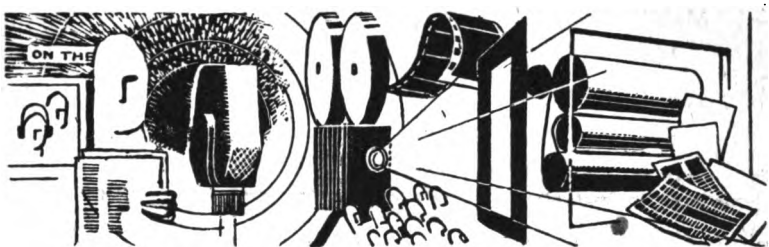
Customs and Excise Department

Provides communication from shore to five launches.

Singapore Fire Brigade

Provides communication from Fire Brigade headquarters to seven fire engines and four ambulances.

In 1953 equipment will be installed to cover the requirements of the Immigration Department and the City Water Department.



XIII

Press, Broadcasting, Films and Government Information Services

PRESS

SINGAPORE has become the news centre of South-East Asia. The four major press agencies have permanent offices in the Colony which is also the centre of the national papers in Malaya; there are four English language dailies, four Chinese, two Malay, two Tamil and two Malayalam, and scores of other periodicals, details of which follow.

The following agencies operate in Singapore: Reuters, Australia Associated Press, United Press of America, Associated Press of America, Agence France Presse, Central News Agency.

The following daily papers are published in Singapore:—

English language:

Morning—*Straits Times*, *Singapore Standard*, *Indian Daily Mail*.

Afternoon—*Singapore Free Press*.

Chinese language:

Morning—*Nanyang Siang Pau*, *Sin Chew Jit Poh*, *Chung Shing Jit Pao*.

A fourth paper, *Ih Shih Pau*, was published on 7th June, 1952, and closed down on 12th October, 1952.

Afternoon—*Nanfang Evening Post*.

Malay language:

Morning—*Utusan Melayu, Melayu Raya.*

Tamil language:

Evening—*Tamil Murasu, Malaya Nanban.*

Malayalam language:

Evening—*Kerala Bandhu, Videsha Malayali.*

The following Sunday papers are published:—

English language:

Sunday Standard, Sunday Times.

Chinese language:

Nanyang Siang Pau, Sin Chew Jit Poh, Chung Shing Jit Pao.

Malay language:

Utusan Zaman, Mingguan Melayu.

The following periodicals are published:—

English language:

Weekly—*Straits Budget, Radio Weekly, Film News.*

Fortnightly—*Brown's Economic Review.*

Chinese language:

Tri-Weekly—*Sin Pai, Yeh Teng Pao.*

Bi-Weekly—*Sin Lit Pao, The Amusement, Everybody's Post, The Champagne Post.*

Weekly—*Sin Chew Weekly, Saturday Review, Feng Pau, Jern Jern Press, Siaw Siaw Pao, Rediffusion News, Film Review, Radio Weekly.*

Fortnightly—*Young Malaysians, Min Chung Pao.*

Monthly—*The World Pictorial.*

Malay language:

Weekly—*Utusan Kanak-Kanak, Film Raya, Utusan Film and Sports.*

Monthly—*Moestika, Qulam, Mutiara, Hiboran.*

Tamil language:

Film News.

BROADCASTING

Broadcasting in Malaya is carried out by the Pan-Malayan Department of Broadcasting which has its main offices, studios and transmitter site on Singapore Island. The Department is organized under the Director of Broadcasting, into Programme, Schools, Engineering and News Divisions, the total staff (of all grades) in Singapore numbering 383.

PROGRAMME DIVISION

The year has seen a steady expansion of the many and varied functions of the Programme Division. By the end of the year the weekly hours of broadcasting totalled 187½ in all languages compared with 160¾ hours at the end of 1951. Early morning programmes in all languages were introduced in December, and listeners are now offered an almost uninterrupted service from 6.30 a.m. to 11 p.m. daily on weekdays and a completely uninterrupted service at week-ends. Plans for 1953 include a further extension of programme hours.

The main programme policy for 1952 has been to take the microphone among the people; people from all walks of life have been interviewed at home, at work and at play, on land and sea and in the air. Unrehearsed broadcasts on controversial subjects in which speakers were allowed to air their individual opinions subject only to the control of an impartial chairman took the air for the first time. Sports commentaries were considerably increased and covered horse-racing, football, hockey, boxing, athletics, motor-racing and badminton (including the Thomas Cup matches).

In the studios, effort has been made to improve the presentation of all programmes and to feature local talent whenever it can be found. Shows in which the audience participates have steadily increased and the auditorium which can seat nearly two hundred people has been heavily booked for concerts, variety shows and quizzes in all languages.

The visit of Their Royal Highnesses the Duchess of Kent and the Duke of Kent to Singapore and the Federation of Malaya was given complete radio coverage in all languages and simultaneous commentaries in Chinese and English were broadcast to the whole of Malaya during the ceremony at which the Freedom of the City of Singapore was conferred upon Her Royal Highness the Duchess. A special observer covered the tour in Sarawak and North Borneo making recordings on the spot which were returned by air to Singapore each day for inclusion in the same evening's programmes.

A Radio Malaya observer was also present during the Olympic Games held at Helsinki in which a contingent from Malaya took part. With the co-operation of the British Broadcasting Corporation this observer was able to make recordings on the spot of his impressions of the scene which included accounts of how the Malayan entrants fared in their events. These recordings were flown immediately to Singapore where they were broadcast over Radio Malaya.

The Radio Orchestra gave over 250 broadcasts and has also supported the Singapore Musical Society Orchestra. The Radio Orchestra is an excellent means of training the young and sometimes inexperienced musicians who augment the orchestra itself and who would otherwise find it extremely difficult to gain the necessary orchestral experience to improve their playing.

Vernacular language broadcasts continued to occupy a prominent position in the year's programmes as the following analysis shows:—

<i>Language</i>		<i>Hours of Broadcasting per week</i>
Indian (Tamil)	..	23 hours
Malay	..	25 hours
Chinese Mandarin	..	} 63 hours and 45 minutes
Cantonese	..	
Amoy	..	
Teochew	..	
Hakka	..	
Foochow	..	
Hainan	..	

The total hours of broadcasting (excluding 'Schools' broadcasts) were 184 hours and 35 minutes per week.

SCHOOLS DIVISION

At the end of 1952, 209 schools in Singapore regularly listened to the Schools Broadcasts, 107 English schools, 74 Chinese, 20 Malay, and 8 Tamil, an increase of 30 over 1951. Sixty-two programmes per week were produced for English, Malay, Chinese and Tamil schools.

Broadcasts to English schools followed the lines of previous years and the highlights were the two Civics programmes for Secondary Classes and Standards V and VI, and an English Literature feature based on the set-books for the School Certificate Examination. Ten programmes originally broadcast for schools in the morning were repeated for the benefit of afternoon schools.

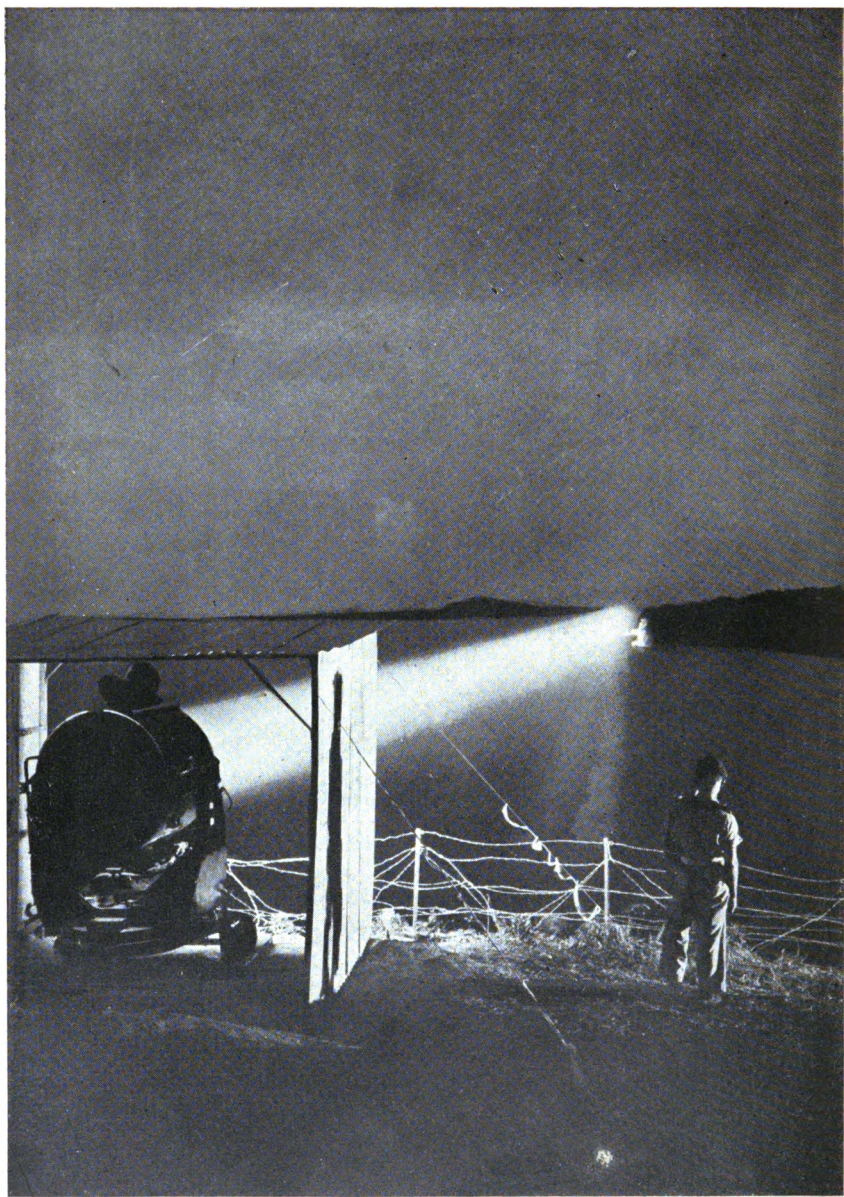
Four weekly programmes of English Language Lessons were for the third year in succession broadcast to Chinese schools for whom the Senior English Civics and Current Affairs broadcasts were also translated.

A very popular feature for Malay schools were the 'Quiz and Debate' programmes of which eight took place throughout the year, three at Singapore and one each at Kuala Lumpur, Ipoh, Malacca, Taiping and Kuantan. These programmes created great interest, not only amongst the boys and girls who participated, but also among adult Malay listeners.

Broadcasts for Tamil schools were inaugurated in May. Programmes were broadcast three times a week specifically for schools and there was a further programme on Saturdays of recorded music suitable for Tamil schoolchildren. Special lessons designed to fit in with school curricula for third term Standard III classes were introduced. The criticism and comments of the Advisory Committees for English, Chinese and Malay schools which met as usual at the end of the year proved most



Kera Monkeys, Chinese scroll painting by Ou Chin Yue (Hon Sin Dressmaking School), aged 19 years



Singapore Police

One of the searchlights used to illuminate the Straits of Johore (see Chapter IX)

valuable. Report cards returned by schools also provided useful material for the improvement of programmes.

On Empire Day, the Governor spoke to schoolchildren in the Colony, and his talk was translated for the Chinese, Malay and Tamil schools.

In September, there were short broadcasts containing slogans and excerpts in all languages advertising the Students' Savings Scheme and the Director of Education made an appeal for support to the scheme over Radio Malaya.

ENGINEERING DIVISION

Despite shortage of senior staff, the following works have been carried out during the year:

Transmitters

An L.T. Distribution Switchboard and a Control Switchboard for stand-by generators were designed and ordered together with necessary cables from local suppliers. The boards will be installed early in 1953.

A new 10 Kw. Medium Wave Transmitter was installed towards the end of the year. It will come into use when the switchboards and cabling referred to above are installed and masts and tuning house for a new aerial system have been erected.

A new 75 Kw. diesel-alternator for stand-by supplies was installed by the Department's own staff. It will be commissioned when the switchgear has been installed.

A new Programme Input Bay was designed to accommodate line receiving amplifiers and equalizers made in the Department's workshops and the work of construction commenced.

All transmitters on Singapore Island are grouped at Jurong, 13½ miles from the city. They comprise two medium wave 10 Kw. transmitters and three short wave transmitters of 8 Kw. 7.5 Kw. and 5 Kw. respectively. A third 10 Kw. medium wave transmitter is being erected.

Studios

Departmental and P.W.D. engineers designed a new continuity suite incorporating a number of improvements. Work on the suite was commenced in December and is expected to be completed by April 1953.

Experiments were made with two sample pickups suitable for playing 'microgroove' recordings. Equalizers were designed to suit the new conditions and the units are being given an extended service trial. If they prove satisfactory, several will be installed in 1953.

Development of a unit to give comprehensive radio checking of programmes on the three medium wave radiations together with visual and aural alarm of failure has been started, which it is hoped to complete and instal in the first half of 1953.

Service Record

An analysis of total transmitter hours worked and total time lost follows:—

Total transmitter hours	..	22,067
Total time lost	..	49 hours and 4 minutes
Percentage time lost	..	0.224

Causes:—

(a) Studio faults	..	..	4 hours and 24 minutes
(b) Line faults	..	..	0 hour and 13 minutes
(c) Control Room faults	..	..	0 hour and 4 minutes
(d) Power failures	..	..	34 hours and 4 minutes
(e) Transmitter faults	..	..	10 hours and 19 minutes
(f) Total of (a), (c) and (e) causes within the Department's control	..	..	14 hours and 47 minutes
(g) (f) as percentage of total	..	..	0.067

WIRELESS LICENCES

Broadcast Listening Station Licences in the present form were first issued in May 1947. The number of licences and revenue therefrom has steadily increased and latest available figures for

November show that there are 33,372 licence holders in the Colony. The following table gives figures for the years 1947 to 1952:—

Year			No. of Licences issued	Total Revenue
				\$ c.
1947	..	..	11,818	141,898 50
1948	..	..	19,193	230,844 00
1949	..	..	24,547	295,564 50
1950	..	..	27,912	335,851 50
1951	..	..	30,351	364,957 00
1952	..	..	33,546	403,182 00

The following table shows revenue collected from Rediffusion (Singapore), Ltd., which began operating in Singapore in July 1949:—

Year			Total Revenue
			\$
1949	..	..	20,787
1950	..	..	102,458
1951	..	..	158,224
1952 (Jan. to Nov.)	..	..	190,630

PROSECUTION OF UNLICENSED LISTENERS

Sixty cases were reported to the Police of persons operating radio sets without a Broadcast Listening Station Licence. Fifty-five persons were prosecuted of whom fifty were convicted; five were discharged. Fines imposed which varied from \$2 to \$100 amounted to \$1,134. A continuous check is kept to ensure that all licences are renewed on expiry and that all purchasers of new wireless sets obtain licences from the Post Office.

NEWS ROOM

News bulletins, in all languages, took up 1,272 hours of broadcasting time. Bulletins are broadcast daily in English, Malay, Tamil, Mandarin, Cantonese, Amoy, Foochow, Hainan, Hakka and Teochew, and by the end of the year 28 news bulletins were broadcast each day. Early morning broadcasts were introduced

on 7th December and the first news bulletin of the day is now in Tamil at 0640 hours, followed by Mandarin at 0700, Malay at 0715, and English at 0730.

During the year, increasing emphasis was placed on the production of newstalks explaining events in Malaya and the outside world, and these have now become a permanent feature of Radio Malaya's news service.

REDIFFUSION

Wired broadcasting is carried out in Singapore by Rediffusion, Ltd., a company which operates under Government charter. Details of the Company's operations follow (all figures being for 31st December, 1952):—

1. *Staff*

All grades total 201.

2. *Location of Studios and Office and Central Control*

Clemenceau Avenue, Singapore.

3. *Types of Programme Broadcasts*

English 69½ hours per week.

Chinese 134½ hours per week total.

Mandarin

Foochow

Hokkien

Hainanese

Cantonese

Hakka

Teochew

Shanghai

Malay 10 hours per week total.

Total 214 hours per week.

4. *Number of Licensed Subscribers (as at 31-12-52)*

27,022

5. *Plans for Expansion in 1953*

The Paya Lebar and Tampenis areas of Singapore and that south of the proposed new Airport are to be developed.

FILMS

There are three local companies which produce films in Singapore, all in the Malay language. Their products are limited in number and have little appeal except to Malays.

All principal British and American film companies are represented in Singapore and are the main source of supply of English-speaking films. Indian and Chinese films, the latter from

Hong Kong, are imported in quantities for the entertainment of the very large Indian and Chinese population.

The only Government sponsored films are those made by the Malayan Film Unit in Kuala Lumpur and those whose exhibition is arranged by the Public Relations Officer. Except for these latter films and short advertisement films, distribution of films is entirely through commercial cinemas. The two main circuits are the Cathay Organization and Messrs. Shaw Bros., Ltd.

There are thirty-one permanent commercial cinemas in Singapore; about ten other temporary travelling cinemas operate in the rural areas, moving their pitch when audiences begin to fall off.

GOVERNMENT INFORMATION SERVICES

The Public Relations Office acts as spokesman for the Government, carries out all publicity work which it requires, including specialized publicity measures such as exhibitions, campaigns and the production of posters, booklets, pamphlets and films. It also keeps the Government informed of public opinion on Government policy and action and of current world affairs. It can therefore be said that the Office maintains a two-way traffic between the people and their Government.

During the year, the Public Relations Office carried out eight major publicity campaigns, held six exhibitions and produced 16 publications (255,500 copies), 32 posters (49,500 copies) and 98 cinema slides on 8 subjects. Thirty-one press conferences were held and 2,045 press statements were issued including those issued on behalf of the Services, the Commissioner-General's Office, the Government of the Federation of Malaya, the Colonial Office and the United Nations Organization and its agencies.

The two Public Relations Film Units gave 482 free educational shows to a total estimated audience of 189,182 people. Its two Public Address Units visited 1,509 places and gave 2,352 addresses to a total estimated audience of 327,490 people in the

City and rural areas, including the neighbouring islands which were visited by launch.

The most successful and outstanding of the major publicity campaigns was an island-wide drive for vaccination during which almost every publicity medium was used. The effectiveness of this campaign may be judged from the result that more than 540,000 people were vaccinated in a period of three-and-a-half months.

Apart from the publications mentioned above, the Public Relations Office produces four regular publications:—(a) Monthly Pictorial Calendar; (b) Photo News; (c) Min Chung Pao (Peoples' News) a newspaper in Chinese published twice monthly and distributed widely especially to people living in the rural areas where reading material is scarce; and (d) a monthly Economic Information Bulletin, published from information supplied by the Economic Affairs Branch.

Altogether 750,783 copies of printed publicity material produced locally or supplied by the Colonial Office and the United Nations Organization were distributed during the year.

It is also the responsibility of the Public Relations Office to spread information about Singapore in other lands. To this end the Office took part in the Colombo Exhibition, and was responsible for the collection of material for display at the annual British Trade Fair held in Earl's Court, London. It also supplies material and photographs regularly to Government or to foreign newspapers on request.

In acting as the eyes and ears of the Government the Public Relations Office monitors all vernacular newspapers, and operates a press-cutting service. It produces daily and weekly Press Digests.

During the latter part of the year closer contacts between the Press and Heads of Government Departments were established, and greater freedom for the Press to make direct inquiries assured. Regular press conferences were held by Heads of Government Departments.



XIV

Local Forces

GENERAL

BUDGETARY PROVISION for Defence in 1952 was nearly \$12,000,000 compared with \$6,000,000 in 1951. More than half the increase was in respect of Civil Defence services for which plans had been laid in 1951. During the year these plans were modified to concentrate training resources upon the production of a limited but well trained and reliable reserve of Civil Defence instructors and leaders capable of rapidly training expanded forces on the approach of an emergency. This change while better preserving interest and enthusiasm without sacrificing real preparedness has also enabled economies in Civil Defence expenditure and the re-allocation of resources to the armed forces in planning their development for 1953 and succeeding years.

During the year the regular naval and volunteer sea, land and air forces continued their consolidation and preparations were advanced for considerable expansion particularly of the naval and military forces in 1953.

In addition to the Civil Defence Corps, the Auxiliary Fire Service, the Singapore Hospital Reserve and the Singapore Harbour Board Reserve were all established and undergoing

training by the end of the year. Increasing interest was shown by youth of the Colony in the land, sea and air cadet corps for which funds are provided annually.

Towards the end of the year the Colony Legislature voted a free gift of \$8,570,000 as a contribution to the enormous cost incurred by the United Kingdom in imperial defence.

ARMED FORCES

ROYAL MALAYAN NAVY

The Royal Malayan Navy is the direct descendant of the Malay section of the Royal Navy raised by Admiralty in 1939 on the outbreak of World War II. The officers were lent locally by the Admiralty, while the ratings, all Malays, were recruited mainly into the seaman and communications branches. The section expanded rapidly, and numbered nearly 900 officers and men when Singapore fell in February 1942.

During the Malayan Campaign, about 100 men died on active service, and about the same number were reported missing. At the fall of Singapore, another 150 men who assisted in the evacuation of the city sailed for further service abroad, and served in Ceylon, East Africa and India, returning to Malaya with the liberating forces in 1945.

By the end of 1946, about 650 men who had either been left behind when Singapore fell, or who were serving in ships sunk by the enemy in the days immediately preceding and following the evacuation, had reported back for duty. Post-war financial stringency caused the disbanding of the Malay section of the Royal Navy and it finally closed down in April 1947.

The New Navy

Tentative plans, however, were already being made to raise a local naval force, and on 24th December, 1948, the Governor, Sir Franklin Gimson, K.C.M.G., signed the Ordinance which authorized the raising of the Malayan Naval Force as a contribution by Singapore to local and imperial defence.

At that time it was proposed that when the Malayan Naval Force had 'acquitted itself honourably in action' it should be raised to the status of a 'Royal' colonial navy, and it was therefore with feelings of real pride that on 23rd May, 1952 news was received that this young naval force was deemed to have fulfilled this condition, and that Her Majesty the Queen, in recognition of its services in action off the Malayan Peninsula, had granted it the title of the Royal Malayan Navy and the designation of the Navy's vessels as 'Her Majesty's Malayan Ships'. A ceremony to mark the occasion was held at the R.M.N. barracks on 29th August and the White Ensign was then hoisted for the first time.

Manning

The Royal Malayan Navy is manned by officers of the Royal Navy and Chief and Petty Officers of the Royal Navy as instructors, and by ratings entered locally on the usual naval agreements. Entry locally is open to young men of all races provided they are British subjects, Federal citizens or persons born in the Federation of Malaya, Sarawak, North Borneo or Brunei, and as appears later in this Report, plans are already well advanced for the entry of Malayan officer-cadets in whose hands will lie the future of this, the youngest colonial navy.

Ships

Since receiving on free indefinite loan from the Admiralty in 1949 a Naval Servicing Craft (Engineering) and a Landing Craft Gunnery (large), later to be named *Malaya* and *Pelandok* respectively, the Royal Malayan Navy has taken over and manned five Seaward Defence Motor Launches on anti-terrorist and anti-piracy patrols off the Malayan peninsula.

Planning

This expansion in operational commitments has been achieved during a period when the lack of proper shore accommodation has precluded the entry and training of recruits on a large scale. This period has, however, enabled a firm administrative foundation

to be laid on which the new navy will be built as soon as the requisite training accommodation, at present under construction, is completed early in 1953.

Naval Operations off the Malayan Peninsula

During the year, the Royal Malayan Navy accepted on free indefinite loan from Admiralty S.D.M.L. 3502, the fifth vessel to be manned and operated by the Royal Malayan Navy on coastal patrols. Another event of importance was the employment of H.M.M.S. *Pelandok* hitherto used exclusively on sea and gunnery training duties, on a large scale bombardment of a bandit area on the west coast of Malaya. The result of this bombardment was encouraging, and the operation proved the value of the useful armament and small draught of a vessel of this type in naval operations in shallow water. It is expected that more use will be made of her in future anti-terrorist operations.

Of the seven Seaward Defence Motor Launches administered operationally by the Flag Officer, Malayan Area, five are manned by the Royal Malayan Navy.

During 1952, each S.D.M.L. spent an average of 135 days at sea or up rivers, steaming between them approximately 91,000 miles while on patrols. Over 1,000 craft of all kinds were searched, and considerable assistance was rendered to the Security Forces, Customs, Fisheries and other authorities as a result of this sometimes arduous and frequently monotonous work.

Locally Entered Officers

Planned expansion of the Navy during the next few years includes the local recruitment of officer cadets and the promotion of ratings from the lower deck to the rank of Branch Officer.

Officer-cadets recruited locally who successfully meet the requirements of the selection board and show promise during the preliminary training at the Royal Malayan Naval Barracks will be sent to England for training. The Admiralty have agreed

to reserve places for them in the Royal Naval College, Dartmouth, and afterwards in the training cruiser. These plans will open a career to well-educated Malaysians which, it is hoped, will attract officer material of the highest quality.

Promotion from the Lower Deck

A start has already been made in the promotion of Malayan ratings to the rank of Branch Officer in anticipation of the approval of the proposed Pay Code. A class of senior ratings is at present undergoing a Selection Course at the end of which it is hoped to make promotions to Branch Rank.

Training

Although there was only a small increase in the numerical strength of the Royal Malayan Navy during the year, and in spite of the fact that there were additional operational commitments to be met, training has been intensified. To fit ratings for the role which the Royal Malayan Navy has to fulfil, emphasis has been laid on the need of a modern naval force for technical ratings. Equipment for the training of such ratings is at present limited, but is gradually being accumulated, and great help has been given by the Junior Technical School where a number of men have attended special courses suited to naval needs.

Twelve classes in the various branches have been trained during the year. In order to familiarize ratings with the complexities of naval communications in big ships under action conditions, arrangements have also been made with the Flag Officer, Malayan Area, for advanced training of senior ratings of the Communications Branch with ships of the Eastern Fleet.

On 16th October the Flag Officer, Malayan Area, Rear-Admiral A. F. Pugsley, C.B., D.S.O., reported to the Governor that he had carried out an annual inspection of the Royal Malayan Navy, and wrote—‘Though still in its infancy the Royal Malayan Navy is making steady progress...; if war comes tomorrow I am confident it would acquit itself well’.

The end of the year marked the end of the first phase of the Royal Malayan Navy, the period of preparation and planning, and with the expansion which will begin in 1953 the Royal Malayan Navy will rapidly develop into an effective fighting force.

MALAYAN ROYAL NAVAL VOLUNTEER RESERVE
SINGAPORE DIVISION

The Straits Settlements Royal Naval Volunteer Reserve had its birth in 1934, with the main division in the Settlement of Singapore. It was re-named the Malayan Royal Naval Volunteer Reserve in 1941.

During the Second World War officers and ratings of the M.R.N.V.R. manned the locally converted minesweepers, and patrol craft, until the fall of Singapore in February 1942. Those who were not captured carried on in the Royal and Commonwealth Navies, the ratings manning shore establishments and craft operating in and from Ceylon.

The Malayan Royal Naval Volunteer Reserve was re-formed in the Colony of Singapore in July 1948, and later was reconstituted as a joint force including a division in Singapore and a division in the Federation of Malaya. An ex-Japanese warship hulk was presented to the Singapore Government by the Royal Navy in 1948, and with funds provided by the Government and a great deal of hard work by the volunteer officers and ratings, the Singapore Division now have in H.M.S. *Laburnum* a first class headquarters ship.

The Singapore Division is commanded by a Captain, M.R.N.V.R., and its officers and ratings are recruited locally from British subjects, Federal citizens, and persons born in the Federation of Malaya, Colony of Sarawak, Colony of North Borneo or the State of Burnei. Commissioned rank is open to all who qualify and twenty per cent of the present active officers are Asians.

This year a Naval Servicing Craft (Engineering) was loaned to the Singapore Division by the Royal Navy for training in the

technical branches. With the assistance of the Royal Navy, Royal Malayan Navy and the Director of Education, Singapore, officers and ratings are being trained in the following branches:—

- (i) Seamanship
- (ii) Engine room
- (iii) Electrical
- (iv) Radio
- (v) Communications
- (vi) Supply and Secretariat
- (vii) Sick berth

Sea training is carried out in H.M. ships, and in the M.R.N. V.R. tenders *Panglima*, *Simbang* and Landing Craft Assault 1737 and 1863. In 1950 when the Police had not sufficient craft to maintain patrols necessary in the emergency, the M.R.N.V.R. carried out anti-bandit patrols every night from sunset to sunrise for twelve months in M.R.N.V.R. craft, manned entirely by M.R.N.V.R. personnel, and during this period intercepted a number of craft attempting to smuggle various commodities into the Colony. Valuable experience has also been gained in an amphibious exercise carried out in conjunction with the Singapore Volunteer Corps and Malayan Auxiliary Air Force, and in a seaward defence exercise with the regular forces.

SINGAPORE VOLUNTEER CORPS*

The Singapore Volunteer Corps is the sixth in a continuous line of military volunteer units raised in Singapore, the first being the Singapore Volunteer Rifle Corps formed in 1854. It saw service in the first World War when it was called out in the Singapore Mutiny of 1915, and in the second World War the force was mobilized and deployed in the defence of Singapore where it acquitted itself with distinction.

Reformed in 1949 as a liaison regiment it has since been completely re-organized, and now comprises the Singapore Royal Artillery, the Singapore Royal Engineers, Infantry and the Singapore Army Service Corps.

Recruitment is open to all who have their homes in Singapore. It has been necessary in the initial stages of reformation and

training to rely for officers on volunteers who have had war experience or post-war military service, but arrangements have now been made for progressive selection and training of officers from the ranks of the force. During the year the services of a regular officer have been secured as a full-time commandant and the regular full-time staff has been increased to enable the expansion of part-time military training and the creation of a trained reserve of manpower which can quickly be mobilized for local defence in time of need.

During the year the first phase of construction of a permanent camp at Changi was completed.

As the result of a recruiting campaign in February and March 435 recruits were enrolled and at the end of the year the strength of the Corps was over seven hundred.

The L.A.A. Battery trebled its strength during the year. Sixty men with two Bofors guns took part in a camp at Kangar Kahang in Johore. Live practices were fired at a sleeve target towed by an R.A.F. aircraft. The Coastal Battery also fired a twin six-pounder gun at a towed sea target whilst in camp at Blakang Mati in October.

All other units have attended camp and sixty-five drivers of the S.A.S.C. (V) have passed the Army driving test. The women of the Fire Command Troop have continued with their specialized training in manning an A.A. Operations Room.

Three hundred members of the Corps took part in the Queen's Birthday Parade in June. A combined exercise with the M.R.N. V.R., and M.A.A.F. was held in August. A Guard of Honour composed of M.R.N.V.R., S.V.C., M.A.A.F. and Police personnel was mounted for H.R.H. The Duchess of Kent on the occasion of the presentation of the Freedom of the City.

The G.O.C. Singapore Base District carried out the annual inspection of the Corps in November. The Rifle Meeting and Iroquois Cup Competition, held at the end of the year, attracted many entries.

MALAYAN AUXILIARY AIR FORCE—SINGAPORE SECTION

The Singapore Section, M.A.A.F., first came into being in June 1950, and there was no lack of applications to join the first Unit, the Singapore Fighter Squadron. This was followed in June 1951, by the formation of the Singapore Fighter Control Unit, an essential adjunct to the Fighter Squadron. In July 1952, the two Units were re-organized as a Wing to facilitate administration.

At present a Wing Commander, M.A.A.F., commands the Singapore Wing, and its officers, airmen and airwomen are recruited from British subjects and persons born in any of the States or territories included in the Federation of Malaya, Colony of Sarawak, Colony of North Borneo or the State of Brunei. The various branches and trades in the force are highly technical and demand a good standard of education, and in the case of air crew, a high standard of physical fitness. Over 80 per cent of all ranks at present on the active list are Asians.

Flying training is carried out in M.A.A.F. Tiger Moths and Harvard aircraft based at the R.A.F. Station, Tengah, under qualified flying instructors on loan from the Royal Air Force. The month of August provided a record flying achievement of 165 flying hours. In September, the Squadron moved into its new Flight Offices at Tengah, which together with the use of an adjacent hangar makes the Squadron fully independent for the task of operating and maintaining its aircraft.

Ground training under R.A.F. instructors is carried out in two of the Singapore Volunteer Corps buildings temporarily adapted for the purpose. During the year the Singapore Section M.A.A.F. engaged in a combined exercise with the other local armed forces.

The Fighter Control Unit is manned to full strength and the acquisition of further technical equipment towards the end of the year has enabled the acceleration of training. There are women members in this Unit training as radar operators and fighter plotters. At the end of the year there was no shortage of recruits for ground duties, but a number of vacancies for pilots in the Fighter Squadron remained unfilled.

CADET CORPS

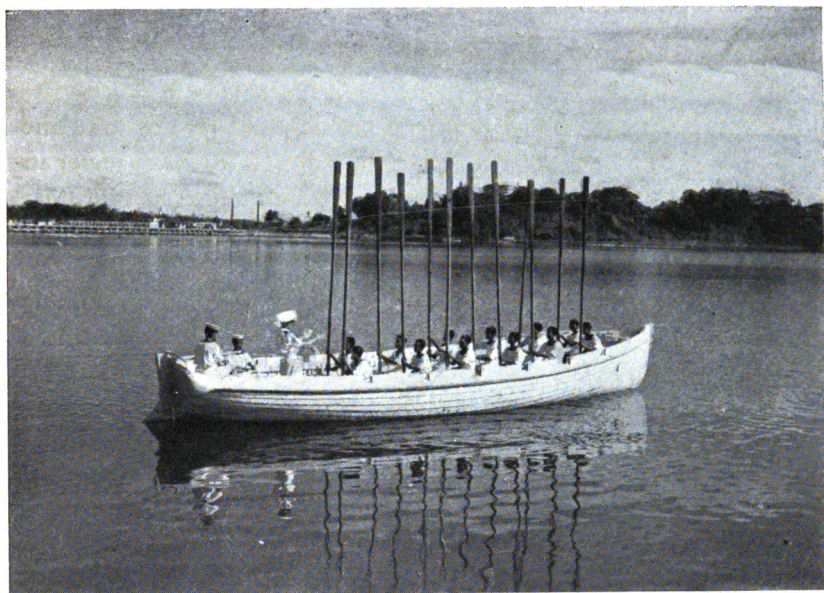
Sea Cadet Corps

The Singapore Sea Cadet Corps was formed late in 1948 and a closed unit in the Junior Technical School was raised under its own officers. An advisory committee was appointed in May 1950 and early in the following year an officer was appointed to command the Corps.

Two more closed units were raised in 1951 and training schedules based on the training of Sea Cadet Corps in United Kingdom were adopted. The Corps, through visits to H.M. ships, harbour cruises in craft of the M.R.N.V.R., and lectures on general subjects, gradually gained experience, and in addition valuable training was obtained during a special camp organized by the Malayan Naval Force at the end of that year.

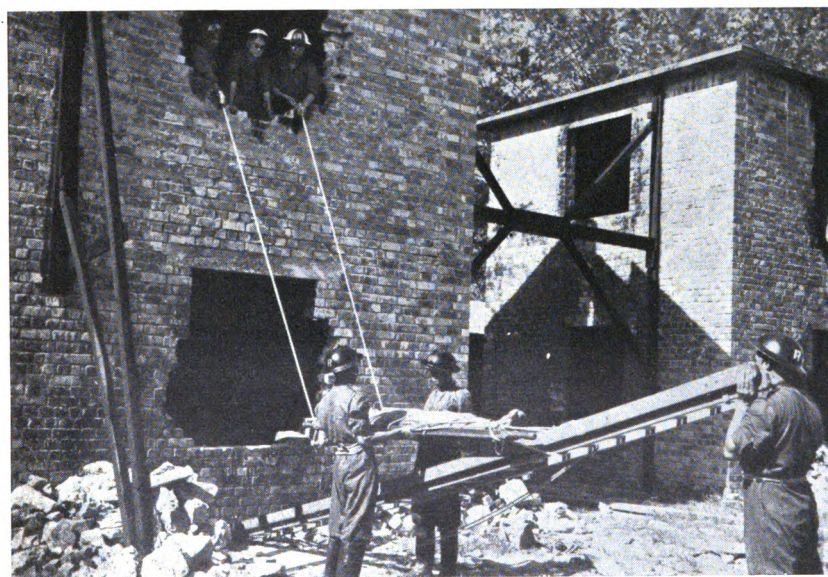
The Flag Officer, Malayan Area, reported favourably upon the Corps following an inspection in February. A fourth closed unit was formed in April and the Commander-in-Chief, Far East Station, visited the Corps in the same month. Later in the year the Corps was inspected by the First Sea Lord and during the visit of H.R.H. the Duchess of Kent a detachment had the distinction of leading a youth parade in her honour. Routine training during the year was supplemented by a special Divisional Officer's course arranged by the Royal Malayan Navy, visits to H.M. ships, Marine Police, a Brazilian naval cadet training ship and an American merchantman in addition to short cruises in vessels of the Malayan Royal Naval Volunteer Reserve. Messrs. Alfred Holt & Co., have awarded an annual scholarship in the form of a voyage to the United Kingdom in a merchant ship, and the Straits Steamship Co., Ltd. have arranged to take two cadets on an annual cruise to Borneo.

Inter-unit games have been fostered, and with the acquisition of several boats, including a sailing dinghy, a challenge cup has been presented for unit boatwork. With the purchase of an ex-R.A.F. Air Sea Rescue launch for conversion, the Corps which now numbers 250 cadets in four schools and one open unit will shortly have its own headquarters.



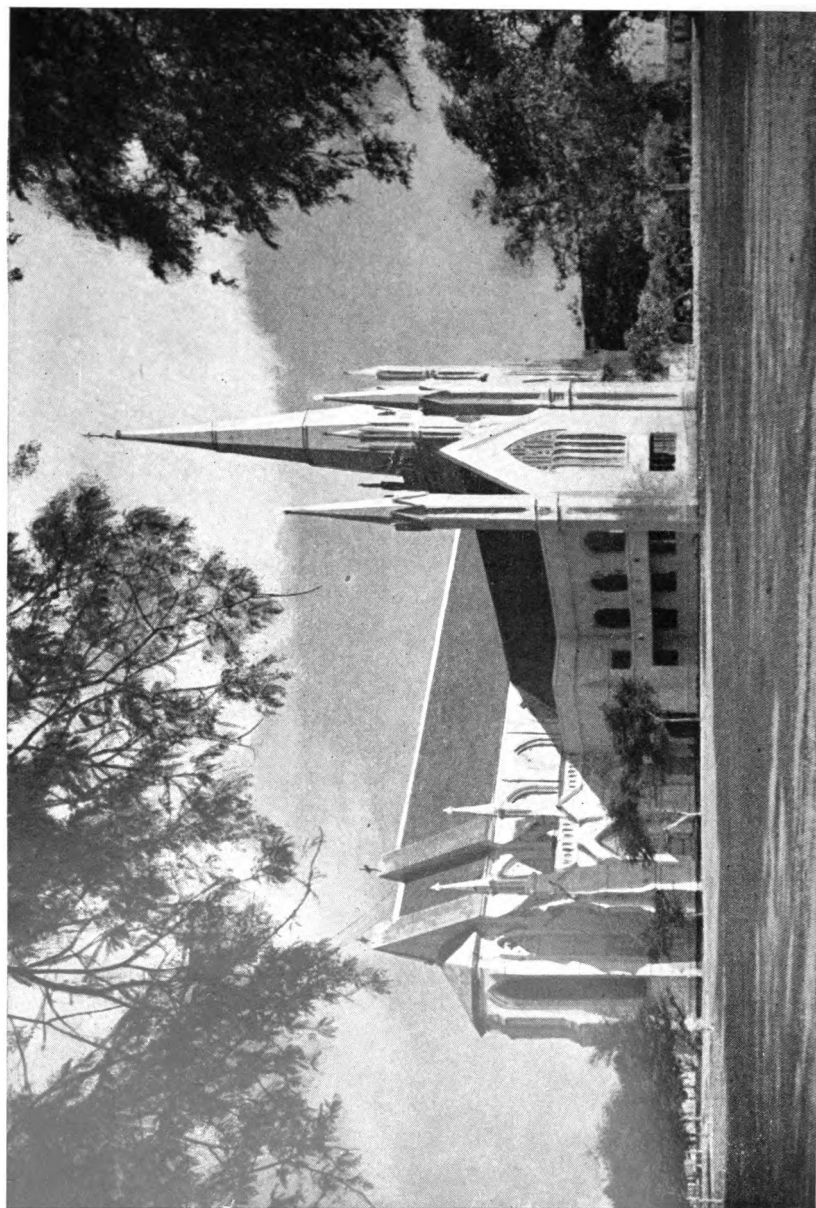
A Royal Malay Navy cutter's crew under instruction

Public Relations



A Civil Defence rescue squad at training

Public Relations



The War Memorial Hall built as an annex to St. Andrew's Cathedral

C. A. Gibson-Hill

School Cadet Corps (Army)

The first Volunteer Cadet Corps (Army) was formed in 1902 from boys of Raffles Institution and was attached to the Singapore Volunteer Corps. It was open to boys from all schools, but up to the end of 1906 it was still virtually composed of boys from the Raffles Institution. In the same year separate companies were formed at St. Joseph's Institution and the Anglo-Chinese School. The latter company is no longer in existence. The main purpose of this Volunteer Cadet Corps was to provide a feeder service for the Singapore Volunteer Infantry. The results were disappointing and early in 1918 these companies ceased to be attached to the S.V.C. and school cadet companies were formed on an independent basis. For a period of about five years from 1921 these companies were disbanded. The St. Joseph's Institution and Raffles Institution Corps were reformed in 1926. Another corps was started in St. Patrick's School in 1936, and these three corps continued up to the Japanese invasion in 1942. The corps at Raffles Institution was reformed in 1947 and those at St. Joseph's Institution and St. Patrick's School in 1948. In the same year the fourth corps was started in Victoria School.

The corps are recruited on a voluntary basis from the pupils in secondary grades. The age of cadets is from fourteen to twenty-one. Each corps is officered by teachers from its own school who are recommended for honorary commissions. The officers commanding and other officers may also hold commissions in the Singapore Volunteer Corps. School cadets with sufficient experience may be offered commissions as under-officers. The major part of the training is undertaken by the officers of each unit with the assistance of instructors from the Singapore Volunteer Corps. In addition assistance in training is given through the affiliation of each corps with a Singapore regular army unit. The four school cadet corps now have a strength of 500 cadets and it is probable that a fifth school unit will be formed in the near future.

Malayan Air Training Corps

The Malayan Air Training Corps (M.A.T.C.) was established in July 1949, and is open to boys of all communities between the ages of 15½ and 18. Its aims follow closely those of the A.T.C. in the United Kingdom, namely to provide basic aeronautical ground training and flying experience, to act as a feeder service to the Auxiliary and Regular Air Forces in the Colony, and to foster good citizenship.

The commandant of the corps, who holds the rank of Wing Commander, M.A.T.C., is responsible for training and administration. An advisory committee advises on all matters affecting the progress of the Corps.

The Corps has considerably expanded since its inception, and now numbers 240 cadets in one school unit (Victoria Afternoon School) and one open unit. The Corps has its own Headquarters building in Waterloo Street, Singapore.

The Royal Air Force continued to give full support by providing R.A.F. officers and N.C.Os. to give instruction in theory of flight, navigation, engineering, radio, armaments and meteorology. In addition to these training facilities, ten cadets completed 10 hours' dual flying instruction in Tiger Moths under the auspices of the Royal Singapore Flying Club. Many more cadets gained air experience in flights in Royal Air Force Sunderland and Dakota aircraft. The Headquarters building has been completely renovated and opportunity was taken to include a radio room equipped for instruction in morse and elementary radio. In short, there are facilities within the Corps for every cadet to gain a little knowledge of modern aircraft, to study the working of radio, to learn the fundamentals of radar and navigation, and perhaps the most important of all, how to conduct himself in future life.

Singapore Harbour Board Reserve

The Singapore Harbour Board Reserve officially came into being on the 10th July, 1952. It is designed to ensure the uninterrupted handling of cargo in the Singapore Harbour Board

area during any war, for which a disciplined force, subject to military law would be an essential. It is not possible in peacetime to hold and train a pioneer battalion for this purpose and the only practicable alternative is to enrol employees of the Board as both officers and men on a volunteer basis, who would on the outbreak of war continue to work in their peacetime employment, but as members of a disciplined military force.

Provision was made for the raising of a nucleus of 200 men and it is of interest to note that there were many more applications than vacancies, which augurs well for future expansion. The Reserve is commanded by a major and to date five subordinate officers have been commissioned. The latter are all Asians.

Training in basic military drill has progressed swiftly under the direction of an S.V.C. instructor. The Harbour Board made available a building for use as a Drill Hall, and proposals are well advanced for a canteen for the exclusive use of reservists.

In December, the Reserve held its first ceremonial parade, at which the Chairman of the Singapore Harbour Board, and the Secretary for Defence and Internal Security, were present. The smartness and bearing of the men on parade clearly indicated the pride and enthusiasm which the members have in their young Force, which reflects great credit on their officers.

CIVIL DEFENCE FORCES

CIVIL DEFENCE CORPS—FOUNDATION OF CIVIL DEFENCE

An Ordinance to make provision for the Civil Defence of the Colony was enacted in May 1951, and during the course of that year the Civil Defence Department, concerned with planning, and the organization, administration and training of the Civil Defence services was established. Thereafter recruiting on a voluntary basis for the Civil Defence Corps, consisting of the five sections, Headquarters, Warden, Ambulance, Rescue, Welfare, was opened, and preparations made for the training of volunteer instructors.

Training

The system of training of the volunteers of the Corps is designed to continue over a period of two years to give them a sound general knowledge of the basic doctrine and practice of civil defence and to fit them for their special roles in time of emergency.

During the first year instruction is imparted in basic first aid and general basic training, which comprises the following knowledge and practice of civil defence:—

Organization, and the functions of the five sections of the Corps.

How to attack a fire, the stirrup-pump, and escape and rescue from burning buildings.

The effects of high explosive missiles, and the reconnaissance and reporting of unexploded bombs.

Features of atomic explosion and radiation; chemical and biological warfare.

Detection, precautions and the fitting, carriage and maintenance of a respirator.

Protective measures and shelters.

Concurrently volunteers undergo a course of 12 lessons in First Aid under the direction of the St. John Ambulance Association and with the help of its instructional staff, both professional and lay.

During the second year volunteers undergo their section training and carry out team exercises.

Progress in 1952

The organization of civil defence of the Colony, and the recruitment and training of the volunteers of the Civil Defence Corps continued to make satisfactory progress. Headquarters was established at Kolam Ayer Lane. The vehicle depot stores and training school with lecture rooms, fire fighting and rescue equipment was opened in February by the Colonial Secretary.

Instruction to classes of selected volunteers, men and women, was immediately begun, with the object of enabling them to become qualified volunteer instructors who in turn could pass

on their knowledge and skill to citizens being enrolled into the Corps. Special attention in these courses was devoted to the teaching of the practice and principles of effective instruction.

Throughout the year courses continued at the School which later was divided into a General Wing and a Rescue Wing, each with its own permanent instructional staff and its specialized equipment. The majority of students have been those civilian Civil Defence Corps volunteers chosen for their ability to lead and instruct: but also a number of Police Inspectors, and officers and N.C.Os. of the Army and Royal Air Force who are required to conduct basic civil defence training in their units in order to co-operate with the civil services in emergency, have passed through the School; while in addition a few members of the Civil Defence Corps of the Federation of Malaya, which operates in close collaboration with that of Singapore, have received training here to fit them as Rescue and General Instructors in Kuala Lumpur and Penang.

The Rescue Section has now seven fully-equipped heavy rescue vehicles, each manned by teams of eight volunteers now receiving specialized training. On two occasions the Section has been in action in congested areas of the City, rendering assistance to the Police and City authorities, while itself gaining valuable experience, in the demolition and shoring of old structures which had partially collapsed or were dangerous.

A measure of decentralization has been effected by the setting up, in the City area and in rural districts, of local Civil Defence Centres. These, located mainly in schools and welfare centres, have as their object the furtherance of team spirit, and facilitation of group discussion and the training of volunteers who cannot conveniently travel to Kolam Ayer, or who require to be taught in a dialect in which instruction cannot be given at the central school.

Progress has been made with the establishment of Civil Defence in industry in which are included all Government and City Council organizations, and commercial concerns, who must

accept individual responsibility for measures to mitigate the effects of air attack. A number of these bodies are now appointing Civil Defence Officers, to assist in the framing of plans and in their direction, and are sending to Kolam Ayer selected employees for training as civil defence instructors who will in turn train their own volunteers.

Auxiliary Fire Service

The forming of an Auxiliary Fire Service to augment the regular fire service in an emergency, as an integral part of Civil Defence, was first considered in 1950. Early in 1952 a practical start was made on the formation of this Service, and on 30th April the Civil Defence (Singapore Auxiliary Fire Service Formation) Rules, 1952, were made.

Plans for a depot and garage situated in Serangoon Road adjacent to the Civil Defence Headquarters have been approved.

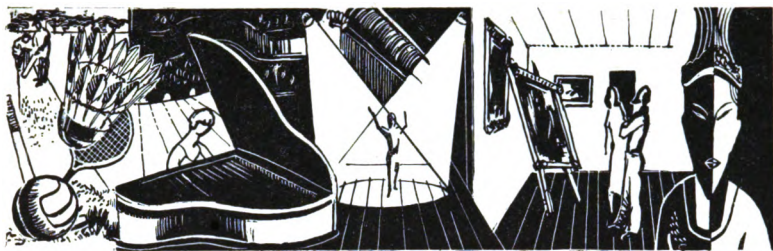
Training will be on the 'training-reserve' system. A total of 250 auxiliaries will be given full training every year, followed by a period on the reserve, during which time they will receive refresher training only. Until the depot is built it is only possible to train a very limited number of volunteers, and at present the training of a nucleus of future officers and N.C.Os. as instructors is being undertaken by the Singapore Fire Brigade.

Singapore Hospital Reserve

The Singapore Hospital Reserve officially came into being in August, with the passing of the Civil Defence (Singapore Hospital Reserve Formation) Rules, 1952, and recruiting opened late this year.

The Reserve is to consist of several sections including medical practitioners, trained nurses, nursing auxiliaries and technical and general duties personnel. Service is either on the Active List, Deferred List or Supplementary List, depending on the category of the volunteer.

It is hoped that the majority of recruits will be members of the St. John Ambulance Brigade or British Red Cross Society.



XV

General

ARTS AND SCIENCES

THE FINE ARTS

THE FINE ARTS continued to flourish as they have done continuously since the war, with still further advances in the production of work locally, and in the presentation by exhibition of works from outside the Colony. The Singapore Art Society staged eight exhibitions, including its annual exhibition of works by local artists and the large-scale inter-school exhibition, and the China Society of Singapore four; the Y.M.C.A. Art Club and the Society of Chinese Artists again held their annual displays.

The outstanding exhibition of the year was undoubtedly the loan exhibition of Chinese Classical Art (to the end of the Tao Kuang Period, 1821-50), staged jointly by the Singapore Art Society and the China Society. The exhibition, which was held at the British Council Centre for ten days in May, and drew over 12,500 visitors, was especially valuable as it gave many local Chinese residents their first opportunity of seeing examples of the finest periods of Chinese art in ceramics and jade. The works on show included 214 carefully selected pieces of pottery and

porcelain, from the pre-T'ang ware onwards, drawn from the leading private collections in Malaya. The display of Sung wares was particularly notable. There was also a good selection of ancient bronzes and jade, and a small number of early paintings. The organizers prepared a full descriptive catalogue which includes 32 plates, and serves as a useful guide to the outstanding pieces of Chinese porcelain and protoporcelain at present in the Colony.

In the second half of this year Singapore also had an opportunity of seeing the work of one of China's leading living painters, Chao Shao-An of Hong Kong, while in February the Art Society sponsored an exhibition of paintings and drawings by the Indian artist Shiavaz Chavda. Professor Chao's work was introduced to the Singapore public in 1951, in an exhibition held by the Art Society. This proved so successful that he decided to come here in person, and this year spent six months in Malaya, accompanied by Lydia Shao-Ling Fang, one of his leading pupils, and herself an artist of some note in Hong Kong. They held three exhibitions in Singapore, and Professor Chao later made a brief tour of the principal centres in the Federation.

The Singapore Art Society's third open exhibition of works by local artists drew a record entry, 104 artists submitting a total of 408 paintings and drawings and 4 modelled casts. The majority of the entries came from Singapore, but work was also received from Johore, Seremban, Selangor, Penang and Kuching. The exhibition, which was held at the British Council Centre in April, was probably the richest and most varied show of local work so far staged in the Colony. All the leading painters in Malaya—Chinese, Malay and European—were represented in it, and the styles ranged from strict orthodoxy in both eastern and Western forms to the advanced and highly accomplished work of Chong Soo Pieng, who manages to combine Eastern feeling with a western technique in a unique manner.

Chong Soo Pieng's work was again the outstanding feature of the annual exhibition by the Society of Chinese Artists at the

end of the year, especially in two very lovely pieces, 'The Puppet Show' and a Kampong Scene. Several local Chinese artists gave one-man shows during the year in the Chinese Chamber of Commerce building. The most important of these was an exhibition by Wu Tsai-Yen, the Colony's leading finger painter. A scroll, *Cicadas and Willow Leaves*, by Mr. Wu is reproduced in this volume.

The Singapore Art Society's eleventh Inter-School Exhibition was again staged during the Colony's Education Week, which on this occasion took place in October, to coincide with the visit of H.R.H. the Duchess of Kent. The exhibition was a notable success, both in the quality of the work displayed and in the manner of its presentation, to which particular attention had been given. This year the number of schools submitting works rose to 86; 1,568 selected pieces were submitted, 979 of which were chosen for exhibition. The various judging committees awarded 68 certificates of commendation to individual works, and 4 for group entries: the leading schools were Methodist Girl's School with 8 certificates, Raffles Girl's School with 7, and Chung Cheng High School with 6. Four of the paintings from this exhibition, works by Miss Margaret Tay, Miss Ou Chin Yue, Miss Phyllis Wee and Lu Chong Meng, are reproduced in this volume. A number of the schools also held their own exhibitions during Education Week, the most notable of which was the display of paintings and pastel drawings by pupils of the Singapore Chinese High School.

Photography

The practice of photography as an art form has now reached a level in the Colony where it merits a small section to itself. The most varied and accomplished exhibition was again the Singapore Art Society's open exhibition in January, which is now drawing work by the leading photographers from all over the world. Entries were received from 212 workers submitting a total of 769 prints; these included 90 overseas entrants, among whom

were such outstanding masters as Aubrey Bodine of America, Francis Wu of Hong Kong and G. L. Hawkins of Great Britain. The success of the exhibition, in all spheres, can best be judged by the fact that for 1953 the Society received a total of 1,239 prints sent in by 365 photographers, among whom were representatives of 30 different countries, in addition to Singapore and the Federation of Malaya. The *Sin Chew Weekly* also sponsored two very successful open exhibitions during the year, for which it drew prints from Hong Kong, Indonesia, Thailand and Vietnam, in addition to local entries.

Exhibitions limited to local work were held by the Chinese Y.M.C.A., the St. John Ambulance Brigade and the Singapore Camera Club. The latter continued its steady growth, and by the end of the year had an active membership of over 250. In September it moved to new and permanent quarters and it now has a lecture room and fully equipped dark-room, among other facilities.

THE BRITISH COUNCIL IN SINGAPORE

The British Council, by so willingly placing its Hall and exhibition space at the disposal of many cultural and welfare bodies, has consolidated its reputation for being the cultural centre of the Colony in recent years. In addition this year it collaborated with the Singapore Art Society in arranging two excellent exhibitions, one of Photographs from the London Times (1921-51), and the other of British Book Design. Its Hall was also the setting for the much publicized United Nations Day Exhibition, which enabled many of the Colony's school children and adults to see an extensive series of photographs portraying the many activities of the United Nations Organization. A special feature of this exhibition was the space given to the World Health Organization.

Many of the Colony's educational establishments, as well as Youth Organizations and others, have made increasing use of the British Council's film and record library. The latter, being

well-stocked with good recordings of classical music, drama and poetry-readings by well-known actors and authors, has a big turnover, while the Council's regular free film shows have enabled interested people to see a large number of cultural films not normally screened commercially.

THE GOVERNMENT PRINTING OFFICE

Efforts have been made by the Government Printer further to improve the quality of all publications and particularly those on which it was felt that the extra expenditure of time was warranted. The year saw three notable examples of book production, the Annual Report of the Colony for the year 1951, the reprint of E. J. Corner's two-volume work on the *Wayside Trees of Malaya* and the well illustrated book *Malaya* by Gerald Hawkins, O.B.E., and C. A. Gibson-Hill, A.R.P.S. These books provided an opportunity for the exercise of design and craftsmanship of which full use was made. Special attention was paid to the colour reproductions in the Annual Report for 1951 in which, it was thought, a very high standard was achieved, especially in the copies of paintings by Suri bin Mohyani and Chong Soo Pieng. The second volume of Corner's work which consists of 228 half tone plates, and the whole of the book on Malaya, were printed throughout on art paper which required very careful handling.

During the year the Department obtained the equipment necessary for printing by the silk screen process, which will increase considerably the range of work upon which it is economical to use colour.

It already possesses a most up-to-date and comprehensive range of type faces and is equipped to produce printed matter in Jawi, Chinese and Tamil characters. It has sixteen linotype and monotype type-setting units, twenty-eight presses of different sizes, including two high speed rotary reel-fed machines; the Book-binding Section is equipped with up-to-date cutting,

folding and sewing machines. New automatic machinery installed this year should enable the range of printing activities to be even further extended.

The Government Printer is responsible for the supply of all stationery and office requisites for Government Departments and International Conferences held in the Colony. During the year the Printing Department used over 200 tons of paper, issued over 28 million official forms and 152,000 account books of different kinds.

There is no pool of trained labour in the Colony from which staff for the printing industry can be recruited, and the Printing Department therefore conducts an apprentice training scheme which has proved popular and should help to inculcate a pride in craftsmanship. Advanced training in the United Kingdom is provided for selected officers. Two Asian Supervisors have been promoted to the rank of Assistant Superintendent after successfully completing a three-year Diploma Course at the London School of Printing and Graphic Arts and two more officers are at present attending the same course.

The staff, which is controlled by the Government Printer and 6 senior officers consists of 274 employees of different grades, and is a representative cross-section of the races of Singapore.

Staff welfare has always received attention and the Department has its own playing field and club house, canteen, Co-operative Thrift and Loan Society and house Trade Union. The younger employees are keenly interested in sport, football, badminton and table tennis being the most popular games.

DRAMA

During the year there was every sign of an increasing interest in, and demand for, live drama. The Singapore Stage Club, which revived its activities towards the end of 1951, produced four plays—Somerset Maugham's comedy of the twenties, *Home and*

Beauty, Robert Morley's *Goodness How Sad*, Terence Rattigan's *Love in Idleness* and a thriller, *The Shop at Sly Corner*, the last two presented on alternate nights in November.

The Little Theatre Players, who also staged four plays during the year, were reluctantly obliged to vacate the Little Theatre in Armenian Street at the end of the year. This is particularly unfortunate, since during five years of enthusiastic work, with many changes of personnel, they had established a certain reputation which in many ways was unique. In the main, although there were deviations from this path, their object was to present plays which might not be commercially successful in a larger and less intimate theatre. In this way works by Barrie, Shaw, Bridie, Fry and Priestley were put before audiences who could not otherwise have seen them in Singapore, at least before the advent of the Singapore Arts Theatre. It is to be hoped that the Little Theatre will be successful in finding equally happy and suitable premises elsewhere in the Colony.

The Singapore Arts Theatre, which established itself so successfully at the end of 1951, has now grown in stature and during the year developed in a manner which promises to provide a permanent and flourishing theatre in western drama of an accepted high standard. It presented Ibsen's *Ghosts* (March), Christopher Fry's translation of Anouilh's *Ring Round The Moon* (June), Joan Morgan's *This was a Woman* (August), Shakespeare's *Merchant of Venice* (October), and T. S. Eliott's *The Cocktail Party* (December). All of these plays drew full houses at the Victoria Theatre, which, with the possible exception of the August production, were predominantly Asian.

The Arts Theatre's August play, which was staged during the school and university vacations was planned to draw audiences whose chief demand was for entertainment rather than intellectual stimulation. This policy is being followed again next year to provide light relief to the more serious works chosen for the remainder of the year. Four special performances of *The Merchant of Venice* for schools enabled 1,800 children to see the play,

though over 2,000 more had to be disappointed. The Arts Theatre directorate has since announced its intention of giving at least one students' matinee of all its future production, except for the August plays.

The Arts Theatre had a membership of over 250 at the end of the year, and six plays had already been selected for production next year.

The Singapore Teachers' Union revived the Youth Drama and Music Festival (last held in the middle of 1950), as part of the Education Week programme. A total of 41 teams from English and regional schools entered for the various classes of the drama section, while similar competitions were organized by the teachers' unions of the Malay and Chinese vernacular schools. Preliminary judging was done at selected centres in different parts of the City and rural areas, and the finalists then repeated their performances in the Victoria Theatre at the end of October. The winners in the English drama section were in the junior class St. Margaret's School, in the intermediate the Convent of the Holy Infant Jesus, in the senior St. Andrew's School and a combined team from St. Joseph's Convent and the Convent of the Holy Infant Jesus and in the open class a combined team representing Raffles Institution and Raffles Girls' School Old Girls Association. The standard of the winning teams was in all cases remarkably high.

MUSIC

The year saw considerable activity in music making, led by the City's two musical organizations, the Singapore Musical Society and the Singapore Chamber Ensemble. In addition to the concerts given by their choirs and orchestras, the year was also memorable for the visit at their invitation of several artists of international standing. The young people in schools and the university gave clear indication of a keener interest in concert-going, while a more concrete expression of this interest was manifested in the increased numbers anxious to learn singing or an orchestral instrument.

The finest impetus to this movement came with the Youth Drama and Music Festival organized by the Singapore Teachers' Union in October, in which 25 choral teams participated. Each had an average of 60 singers in it, making a grand total of 1,500 young people. Increased interest in music was further indicated by the annual examinations of the Associated Board of the Royal Schools of Music of London, for which there were 501 candidates in the various grades.

The concert-goer's year began in February with two pianoforte recitals by Mme. Germaine Mounier, a French artiste of exceptional ability which were presented under the auspices of the Singapore Chamber Ensemble. In March the Musical Society sponsored Jan Smeterlin in a pianoforte recital, and subsequently he appeared as soloist at two orchestral concerts when the Grieg Pianoforte Concerto was performed. April brought the Easter Choral-Orchestral Concert of the Chamber Ensemble, which was memorable for the presentation of the American soprano Minnie Iverson-Wood, who sang Gerald Finzi's *Dies Natalis* with the Ensemble. The other principal work in this programme was *Spring* from Haydn's Seasons.

May saw the appearance in Singapore of Walter Giesecking, in two recitals sponsored by the Musical Society. The following month concert-goers were fortunate in hearing another celebrity, Helen Traubel, the prima donna of the Metropolitan Opera of New York, who gave two recitals under the aegis of the Singapore Chamber Ensemble. In July there were the mid-year orchestral concerts by the Junior Symphony Orchestra, in which the principal works performed were Handel's Water Music and Haydn's Surprise Symphony. The same month the Musical Society presented Coleridge Taylor's *Hiawatha*.

August brought the debut of the young Singapore violinist Susheela Devi, who had recently returned from studies at the Royal College of Music in London. Her recital, which included classical and modern works, was the first such recital by a Singapore violinist. It was sponsored by the Chamber Ensemble, of whose orchestra Miss Devi became leader.

September was a month of great activity for the members of the Ensemble's choir and the orchestra. It marked the visit of the examiner to the Associated Board of the Royal Schools of Music, Dr. Thornton Lofthouse, who appeared with the Ensemble both as soloist (in the Bach Pianoforte Concerto in D Minor) and as conductor (in the Bach Cantata *Praise our God*). Dr. Lofthouse's visit was interesting in that it was the first time a guest conductor had appeared with a local orchestra, and the tremendous fillip given to members of the Ensemble and its choir was a factor in stimulating greater enthusiasm for music making. Dr. Lofthouse's visit was of further value in helping to set higher standards in the interpretation of Bach.

Soon after the Lofthouse concerts Singapore was privileged to hear another celebrity, this time the violinist Alfredo Campoli, who appeared with the Musical Society's orchestra, and performed the Mozart Concerto in D Major K 218 and the Max Bruch Concerto No. 1 in G Minor as principal works.

Finally the year was brought to a fitting close with Christmas Music given by the Musical Society in St. Andrew's Cathedral, and by the Singapore Chamber Ensemble in the Victoria Memorial Hall (as part of the Overseas League festive celebrations) and in a broadcast from Radio Malaya. All the concerts of the Singapore Musical Society held during the year were conducted by Gordon van Hien, and those of the Junior Symphony Orchestra and the Singapore Chamber Ensemble by Paul Abisheganaden.

RAFFLES MUSEUM AND LIBRARY

In the Museum the work of re-arranging the material in the exhibition galleries, with improved presentation, begun shortly after the end of the war continued through the first eight months of the year. Unfortunately it then had to be interrupted while the building received its four-yearly painting, but it seems likely that it will still be possible to complete the job in broad outline early in 1954. Work done this year included the re-organization of the two end galleries in the downstairs portion of the Museum,

now forming the Boat Room and the Borneo Room, and a start on the re-organization of the two galleries joining them to the main entrance hall. Smaller sections completed during the year included displays of contemporary Malay hand-woven sarongs and block-printed cloths, of wood-carvings from Bali, of Indonesian brasswork, and of the commoner local hornbills, hawks and pigeons. Mr. F. Pridmore, B.N.S., continued his work on the coin collection until he left the Colony in November: by then he had completed a catalogue of the material in the Museum collection, and had arranged the exhibits under the following headings,

Private tokens issued by Singapore Merchants, 1825/8-53.

Coins issued under British Authority in Borneo.

Coins issued under British Authority in Java and Sumatra.

Dollar coins current locally from the earliest times.

Siamese coins and gambling tokens.

Coins of the Netherlands East Indies.

In all cases he has also supplied full descriptive labels.

One number of the *Raffles Museum Bulletin* (No. 24, August 1952) was issued during the year, a miscellaneous number of 380 pages, containing 18 papers and notes. The majority of the articles are on ornithological subjects, mostly by the Curator of Zoology, C. A. Gibson-Hill. The most important of the other papers is a review of the Malayan species of *Opisthostoma* (Gastropoda) by Mrs. W. S. S. van Benthem Jutting. A second number of the Bulletin, to be devoted to an annotated checklist of the Mammals of Malaya, including lists of the forms known from the off-lying islands, was in preparation at the end of the year, and should appear early in 1953. *

Field work was again limited by the state of emergency in the Federation, and shortage of senior staff at the Museum. A short collecting trip was made to Raffles lighthouse in July and early in August the Curator of Zoology was able to accompany the newly appointed Colonial Fisheries Research Officer, on a tour of the islands of the Johore Archipelago. Previously, at the

beginning of July, the Director had paid a flying visit to Dungun, in Trengganu, where he found, as had been reported tentatively, an extensive breeding ground of the rare Leathery Turtle, *Dermochelys coriacea* (Linn.). The animals apparently come ashore at a large number of points along the twenty-mile stretch of beach known as Rantau Abang North of the mouth of the Dungun River, on one or two fullmoons round the middle of the year. On the occasion of the Director's visit the first turtles appeared in the surf about 1.30 a.m., and thereafter they continued to arrive until shortly before dawn. The only breeding ground of this species recorded previously is a small area on the East coast of Ceylon, but this does not appear to have been investigated at all fully. A photograph shown to the Curator of Zoology when he was in Bangkok in August suggests strongly that this species also breeds on a beach or beaches on the coast of Junk Ceylon, on the west side of Peninsular Thailand, but at present the Dungun grounds are the only breeding place of which we have definite, specific information.

Nearly half the existing stock of books in the Library had been re-catalogued on the Dewey decimal system by the end of the year, and all new books are now being entered on the Dewey system. The shelves have been re-arranged and labelled to the same plan. Membership of the Library reached the record figure of 5,203. During the year \$27,974 was spent on the purchase of books, covering 2,438 titles, of which 1,081 were fiction. In addition the Library received a donation of 830 books from U.S.I.S., including over 200 children's books, and another of 240 works of fiction from the British Council: the latter is intended for the branch libraries which it is proposed to establish.

The Malayan Branch of the Royal Asiatic Society continued to prosper, and by the end of the year it had a membership of 752, the highest recorded since the first local branch was established in 1878. Two numbers of the Journal were published during the year: these, with a final part which has unfortunately been

delayed by printing difficulties until early in 1953, form Volume 25 of its publications in the new series. The complete volume contains over 650 pages, and includes papers or notes by 13 different authors. The first part is, as usual, a miscellaneous number. It contains 12 papers, and 7 short notes and reviews. The papers relating to Singapore and its immediate neighbourhood include *Tongkang and Lighter Matters* and *The Orang Laut of the Singapore River and the Sampan Panjang* by C. A. Gibson-Hill, *Chinese Rites for the Repose of the Soul, with special reference to Cantonese Custom in Singapore* by Marjorie Topley, and *A Journal of a Frenchman in Malayan Waters, 1804*, edited by Professor C. N. Parkinson. The second number is devoted to a new translation of the Malay Annals, specially prepared for the Society by C. C. Brown. This, which is based on Raffles's MS 18 in the library of the Royal Asiatic Society in London, is the first English translation of a complete text, and the only one now in print. The last part for the year is devoted to documents relating to John Clunies Ross, Alexander Hare and the establishment of the colony on the Cocos-Keeling Islands. These have been prepared for publication, with notes and a biographical introduction, by C. A. Gibson-Hill, the editor of the Society's Journal.

BOTANY AND HORTICULTURE

Despite the lack of senior staff, and the difficulty of sending collectors to the Federation of Malaya, the Herbarium continues to receive accessions of material from various sources, although at the moment very little can be offered in exchange. Valuable duplicate material has been received from North Borneo, Holland, Indonesia, America, India, the Philippines and New Guinea. Two small but most interesting collections made in Malaya have been donated, one from the little-known area of Gunong Padang and Gunong Sembilu, in Trengganu, made by Mr. J. A. Hislop, and the other, chiefly of ferns, given by Mrs. F. G. H. Allen.

The only publication from the Botanic Gardens during the year was the fifth booklet in the series *Malayan Garden Plants*, which describes and illustrates ten palms of horticultural interest, but very good progress has been made in setting up the first volume of the new Flora of Malaya, which is to be an account of the Orchids of Malaya, written by Professor R. E. Holttum. This volume will cover both the native orchids, of which there are nearly 800 species, and the cultivated ones and the hybrids.

A rough census was made on several Sundays to ascertain the number of people and cars entering the Botanic Gardens. The figures on a normal Sunday without rain were over 4,000 people and between 500 and 600 cars.

Over 300 orchid cross-pollinations were made during the year, not all of which, of course, resulted in the production of seed. Numerous crosses involving various kinds of *Aranda* (Arachnis—Vanda hybrids) have been attempted, mostly without success. Large pods, of apparently great promise, may result, but except in a very few cases they are quite deceptive and contain no seed. Rather fewer new orchid hybrids than usual have flowered during the year, but amongst them are one or two of interest and quality. Perhaps the finest was Vanda Josephine van Brero x Vanda Dearei, which, incidentally, illustrates the co-operation between the Botanic Gardens and local orchid fanciers. The cross was made by Mr. H. S. Tan, the seeds were germinated and the young plants raised by the Gardens, and the first seedling to flower was in the care of Mr. Tan Siew Kuah. This hybrid has been named Vanda Tan Chay Yan, and is remarkable because of its large, peach-coloured flowers. A very free flowering Vanda hybrid which flowered for the first time is Vanda Wong Peng Soon, seed of which was given by Mr. John Laycock. Although its flowers are not large, they are numerous in each spike, and in the best seedlings are pleasing in colour.

The Singapore Gardening Society, which was founded in 1936 by a member of the staff of the Botanic Gardens, is a vigorous association of enthusiastic amateur gardeners, which

meets monthly to hear lectures upon, or to see demonstrations of, various aspects of gardening in the tropics. Its annual Flower Show, which usually takes place about the end of March, was even bigger and better than in previous years, although the bulk of the entries are still shown by comparatively few exhibitors. Apart from the orchids, which accounted for about one-third of the Show and were, as usual, the most striking feature of it, a praiseworthy exhibit was that of Gloxinias grown by members of the Society from corms donated by K.L.M., and flown out from Holland.

THE CHEMISTRY DEPARTMENT

Previous Reports have referred only to the forensic work of this Department, which this year has been increasingly used in the investigation of hit and run motor accidents. In two cases conclusive identification of pieces of paint found at the scene of the accident with the cars from which they came has been possible. This type of work has led to greater use of physico-chemical instruments, such as the quartz spectograph which has been employed in the qualitative analysis of traces of paint, metals, and earth in crime exhibits. A photoelectric spectrophotometer purchased during the year will enable identification and estimation of trace amounts of alkaloids and other poisons in toxicological investigations without destroying the material examined. It is particularly useful in the identification of traces of tuba root resin, by which human poisoning is not uncommon in this part of the world, though rarely reported elsewhere.

Analytical and advisory work of a very diverse character is undertaken not only for Government Departments but also for the Services, the Singapore Harbour Board and for shipping and other commercial firms. This includes examination of samples of liquors, opium, food, drugs and petroleum, the inspection of petroleum carrying ships for freedom from vapour and specialized analyses of toxicological specimens.

SPORT

Sport, to use the term in its widest sense, plays a great part in the life of the Colony, and of all public interests it is perhaps the one which is common to the greatest number of people of all classes.

Organized amateur sport in the Colony has developed tremendously since the war; the number of associations and members has increased, standards of performance and conduct have improved. The list of sports organized in the Colony by controlling bodies is impressive and includes athletics, association football, boxing, badminton, cycle racing, cricket, hockey, swimming, tennis, rugby union, water polo, weight-lifting, table-tennis, basket-ball, yachting, rowing, archery, motor-racing, horse racing, golf and polo.

Many of our sports associations are young and very few are more than 50 years old, but the standards of achievement and organization have progressed rapidly during the last few years. Most of the principal organizations are affiliated to their various international controlling federations, and to the Singapore Olympic and Sports Council, which itself is affiliated to the International Olympic Committee, and has been a great stimulating force in the field of amateur sport since its formation in 1947. The Colony has been represented at the 1948 and 1952 Olympic Games. A Colony team was sent to Auckland for the British Empire Games in 1950, and a large contingent of amateur sportsmen, wearing the Colony crest took part in the First Asian Games at New Delhi in 1951. The finals of the Thomas Cup, recognized as the World's badminton championship trophy, were held in Singapore this year, and the Malayan team, which included many Singapore players retained the Cup which they won in England in 1948.

The Colony Table Tennis Association organized the first Asian table tennis tournament, which was played in Singapore. The Singapore Rugby Union XV competed in the 'All-India'

Rugby Football Tournament at Colombo for the first time and won the trophy. The Colony's association football team retained the Malaya Cup which they won in 1950 and 1951, and the Singapore Amateur Athletic Association won the Malayan Inter-State trophy for the fourth year in succession.

The Royal Singapore Yacht Club won all the events at the Inter-Port Regatta held in Hong Kong. The Singapore Hockey Association won the Southern section of the Malayan Hockey Tournament and will meet the winners of the Northern section early next year.

During the year the Singapore Olympic Council maintained its interest in the provision of playing fields and sports facilities in the Colony. The Singapore Stadium Board appointed at the beginning of the year held its first meeting in April. A site for the proposed stadium is being investigated and all sports associations are hoping that the Colony will soon possess a sports stadium in keeping with the status and dignity of a big city.

The successes of many of the Colony sports associations are due largely to the tremendous interest and high standard of performance in sport in the Colony schools.

All the large business houses in Singapore have their own sports clubs and many of them have their own sports grounds. Sport is a very popular activity in the Colony's youth clubs.

Athletics

The Singapore Amateur Athletic Association was formed in 1934, and became affiliated to the Singapore Olympic Council and the International Amateur Athletic Federation in 1947. There are 17 athletic clubs in the Association with a total membership of more than 1,000 athletes. This Athletic Association was the first sports body in the Colony to send a representative to the Olympic Games, in 1948 in London when Lloyd Valberg competed in the high jump. The first woman competitor from the Colony to compete in the Olympic Games is also a

member of this association. She was Miss Tan Pui Wah, who ran in the 100 metres and 80 metres hurdles in this year's Games in Helsinki. The improvement in standards of performance was largely due to organized coaching schemes which received a tremendous fillip from the visits of some of Britain's leading athletic coaches. Mr. Geoffrey Dyson the chief athletic coach of the British Amateur Athletic Association visited the Colony in 1950, Mr. Ray Barkway in 1951, and Mr. George Pallett at the end of this year.

Boxing

The controlling body for boxing in the Colony was founded in 1929. This association is now affiliated to the Colony Olympic Sports Council, and to the Amateur International Boxing Federation.

In this year's annual championships there were 70 entries, and for the Youth Boxing Tournament organized for the first time this year there were 160 entries.

Cricket

The Singapore Cricket Association was formed in 1949, although there is no doubt that this game must have been played in the Colony more than sixty years ago.

The Association has organized a cricket league, and this year, twenty-one clubs took part in the competitions.

Hockey

The Singapore Hockey Association was founded in 1931 and was affiliated to the International Hockey Federation in 1948. Thirty-nine hockey clubs are members of the association, and are divided for competition purposes into two divisions. The Colony team is in the final of the Malayan Inter-State tournament. Preparations are being made by this Association to improve standards up to 'Olympic' level, with a view to competing in the 1956 Olympic Games.

Football (Association)

The Singapore Amateur Football Association was founded in 1892, with a membership of less than ten teams: this year eighty clubs were affiliated to the Association. Visits from overseas teams are always popular, and four touring teams played matches in Singapore this year, the Aryan Gymkhana of India, the Hong Kong Football Association, the Athenian League XI of England, and the South China Athletic Association of Hong Kong.

The Singapore Association was affiliated to the International Football Association this year.

Rugby Union

It is very pleasing to see that every season there are more Asian members creeping into the State teams, denoting the spreading popularity of the game, and the interest taken by the senior schools in the Colony.

The Singapore Rugby Union XV won the 'All-India' Cup tournament played in Ceylon this year.

Swimming

The Singapore Amateur Swimming Association consists of the three large swimming clubs which have their own swimming pools and smaller clubs where members use the public swimming pools built by the City Council. Standards of swimming are high, and the Colony swimming team won most of the swimming events at the Asian Games. One member of the Association represented the Colony at the Olympic Games in Helsinki.

Weight-lifting

The Singapore Amateur Weight-lifting Federation was formed in 1934 and became affiliated to the International Weight-lifting Federation in 1948. Thirteen local clubs are affiliated to the Federation, with an approximate total membership of 1,300 athletes. Performance in this sport, in the lighter weights, is up to international standard. The Colony has been represented by

members of this Federation at the Olympic, Empire and Asian Games. At the Singapore Championships this year, the feather-weight lifter reached a total of 705 lb. which is an Empire record.

Yachting

There are five active Yacht Clubs in the Colony of which the largest is the Royal Singapore Yacht Club which was founded in 1919, and has approximately 500 active members, and more than 100 registered sailing yachts. The largest yachts now racing are the International Dragons, a keel class yacht of Norwegian design.

Preparations are being made with a view to competing in the 1956 Olympic Games. The other four Yacht Clubs are Services Clubs.

Rowing

Rowing has flourished on a small but active scale in the Colony since the old Singapore Rowing Club was founded in 1879. Amalgamation with the Royal Singapore Yacht Club took place in 1921. The season extends from April to December, during which time regular regattas, including events for fours, pairs and sculls are held.

At the Far Eastern Inter-Port Regatta held in Hong Kong this year the Royal Singapore Yacht Club (Rowing) won all the events including the principal trophy, the Inter-Port Fours Challenge Cup.

Badminton

The Singapore Badminton Association was founded in 1929. There are approximately 75 clubs with a total membership of over 3,000 players. The Singapore Association and players contributed much towards winning the 'Thomas Cup' for Malaya in 1948, and retaining it this year.

Table Tennis

The Colony Table Tennis Association founded in 1930 has 42 member clubs and is affiliated to the International Table Tennis Federation.

The first Asian Table Tennis Championships were organized by this Association, and played in Singapore during the year.

Cycle Racing

The Cycle Racing Association was formed in 1950 and now has seven affiliated clubs and 63 members.

Fourteen cycle races were held during the year and the two best records were 25 miles time trial road race of 1 hour 2 minutes 34 seconds, and the quarter mile hill climb of 1 minute 3 $\frac{3}{4}$ seconds.

Archery

An Archery Association was formed in 1950, and now has a total membership of 80 active members. Several competitions have been held during the year, and there is a very keen junior section.

Horse Racing

The amateur section of this sport is centred round two clubs; the Singapore Polo Club and the Bukit Timah Saddle Club. The Polo Club has been in existence a great number of years, while the Saddle Club has been formed since the war.

The professional racing is controlled by the Singapore Turf Club, which was founded in 1842, with a membership of 510. There are now over 30,000 members.

THE COLONIAL DEVELOPMENT AND WELFARE ACT OF 1945
GRANTS AND EXPENDITURE

Title of Scheme	Total Cost	To be met from Colony Funds	Total C.D. & W. Grant	Total Expenditure up to 31-12-52	Actual Expenditure during 1952	Balance of Grant	Remarks
BROADCASTING Scheme No. D. 1316							
1 Purchase of Community Receiving Sets (£8,275)	70,929	..	70,929	66,702	46,563	4,227	
CIVIL AVIATION Scheme No. D. 1632							
2 Aeronautical Telecommunications (£18,000) ..	154,286	..	154,286	115,324	115,324	38,962	
FISHERIES Scheme No. R. 440							
3 Regional Research Laboratory (£260,000) ..	2,914,286	685,714(d)	2,228,572	33,330	33,330	2,195,242	(d) Apportionable between Federation of Malaya, Sarawak, North Borneo and Brunei
MEDICAL Scheme No. D. 1431							
4 School Medical and Dental Clinic (£23,335) ..	480,000	280,000	200,000	..	..	200,000	Scheme not yet started
5 Expansion of Leper Settlement (£72,800) ..	779,823	155,823	624,000	350,402	192,135	273,598	

Scheme No. D. 1493							
6	Child Welfare Clinics—two (£15,750) ..	329,000	194,000	135,000	135,000	108,220	Nil
SOCIAL WELFARE							
	Scheme Nos. R. 372, R. 372A and R. 372B ..						
7	Sociological Research (£5,001) ..	42,866	..	42,866	42,866	12,828	Nil
Scheme No. D. 1593							
8	Girls' Hostel/Club (£17,500)	187,500	37,500	150,000	..	..	Scheme not yet started
9	Boys' Hostel (£17,500) ..	187,500	37,500	150,000	..	..	Scheme not yet started
HARBOUR BOARD							
10	New Graving Dock (Loan of £204,167) ..	6,000,000	4,250,000(b)	1,750,000	..	..	Scheme not yet started (b) To be met from Singapore Harbour Board Funds
METEOROLOGICAL							
	Scheme No. D. 1706						
11	Regional Upper Air Programme and Regionalisation of Stores (£42,700)	462,728	96,728(c)	366,000	36,082	36,082	(c) Apportionable between Federation of Malaya, Sarawak, North Borneo and Brunei
Total ..		11,608,918	5,737,265	5,871,653	779,706	544,482	5,091,947

Pictures taken during
The Visit of
Their Royal Highnesses
The Duchess of Kent
and
The Duke of Kent

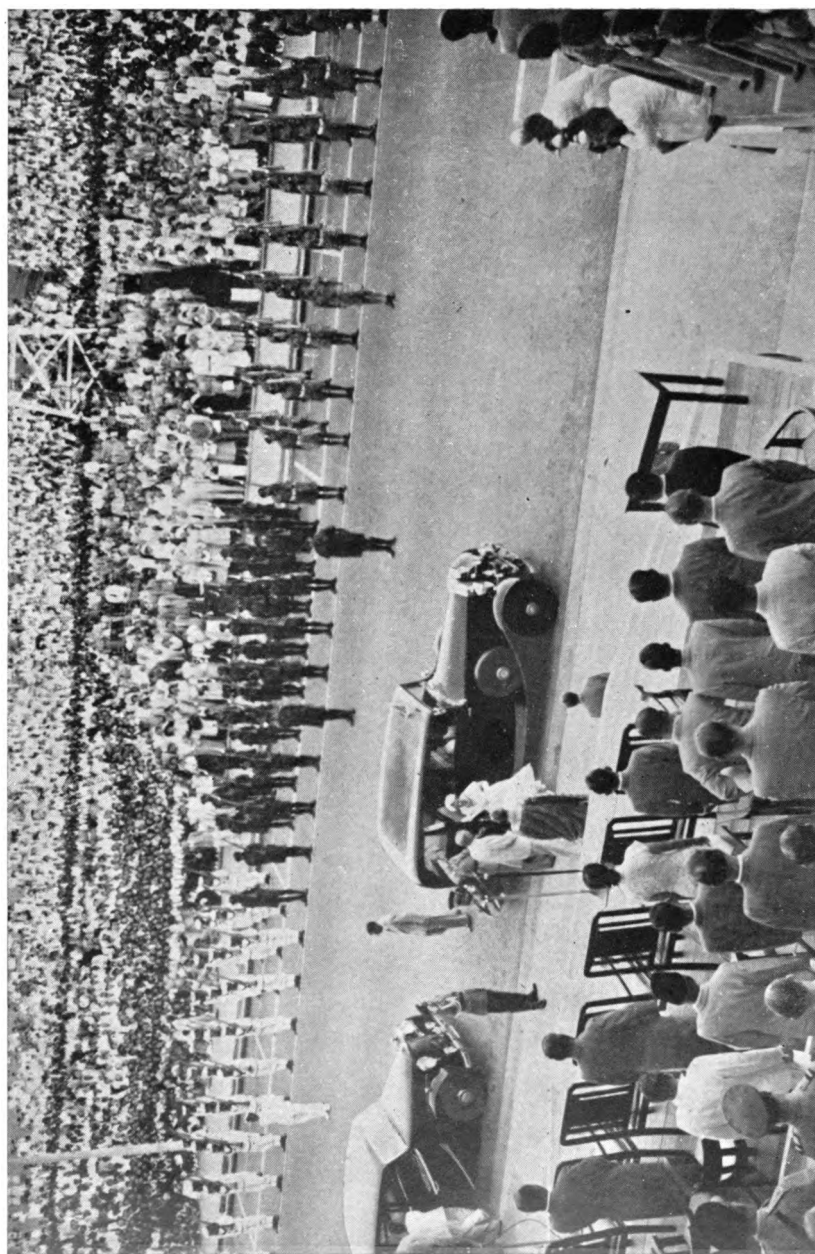
October 1952



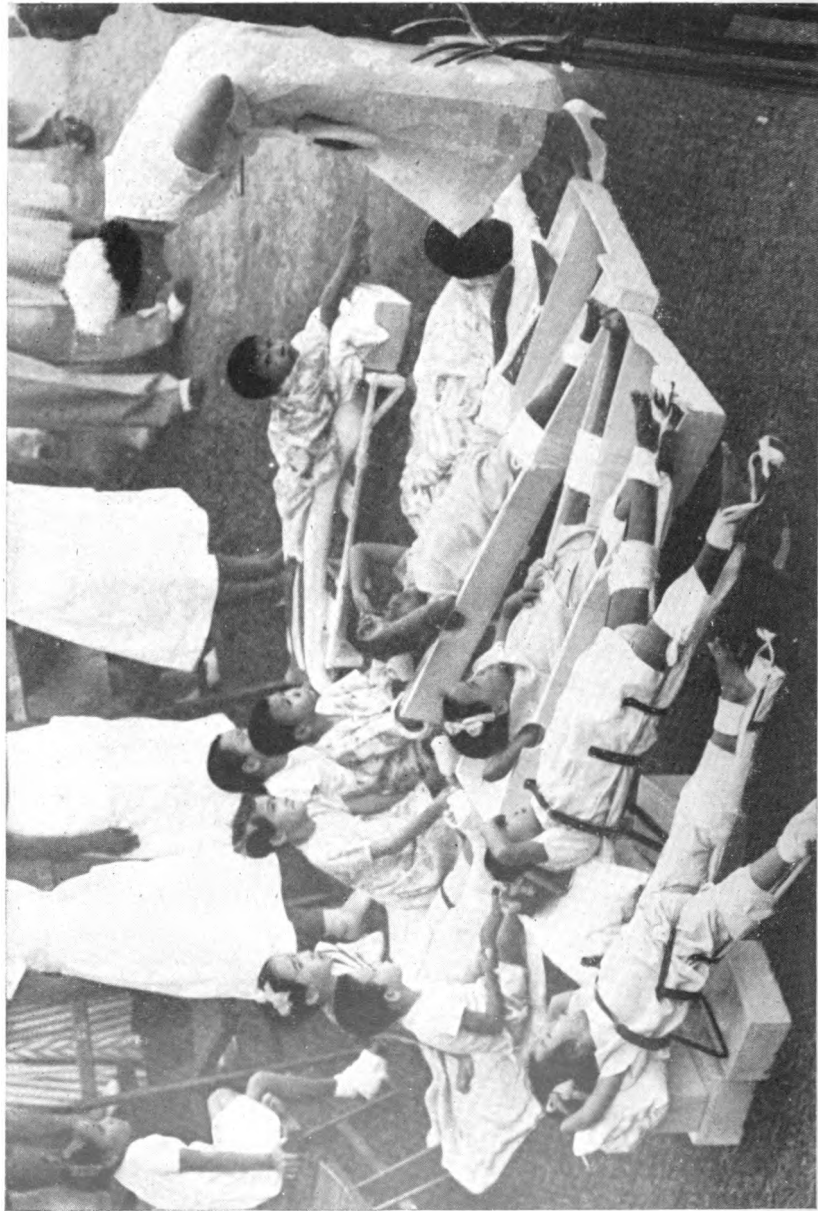
Her Royal Highness the Duchess of Kent arrives at Kallang Airport



..... talks to a member of the R.A.F. Regiment (Malaya) while inspecting the Guard of Honour on her arrival



Public Relations
Her Royal Highness arrives at the City Hall for the ceremony of presentation of the Freedom of the City



Straits Times

.....talks with crippled children from St. Andrew's Orthopaedic Hospital who attended the ceremony.....

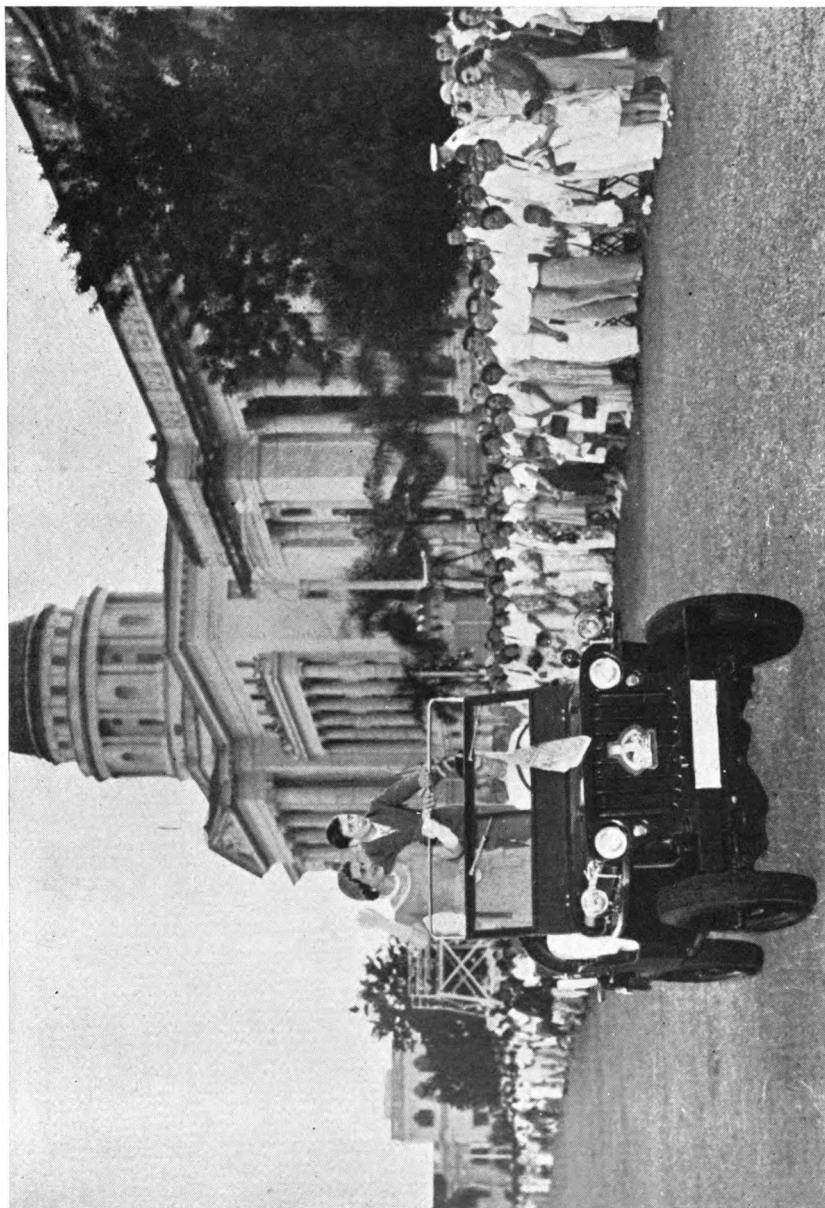


Chung Shing

.....accepts the Freedom of the City from the President of the City Council



Their Royal Highnesses with the Governor at the Ball at Government House

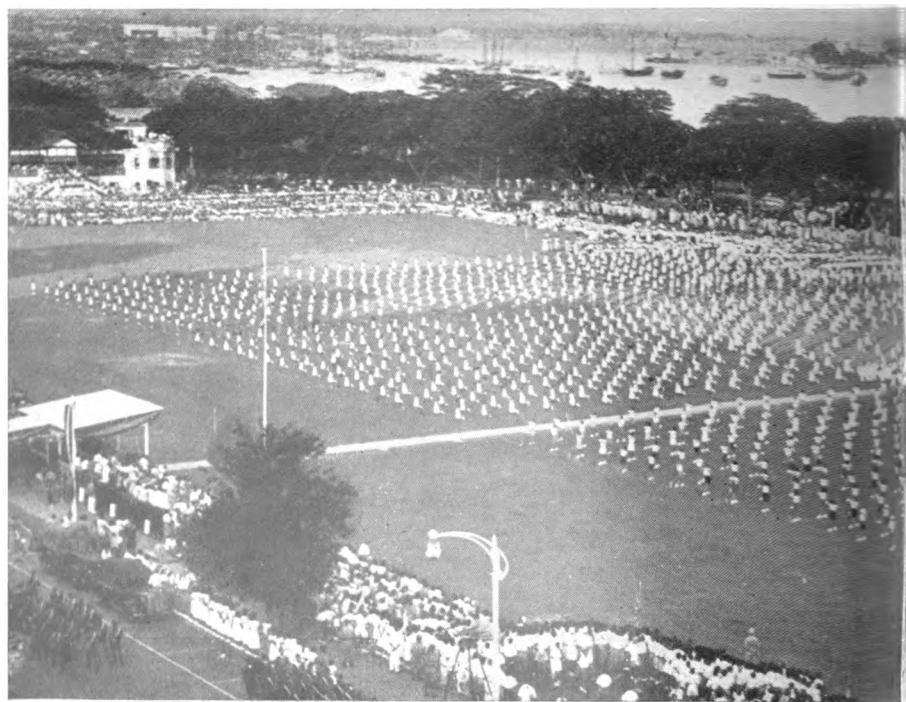


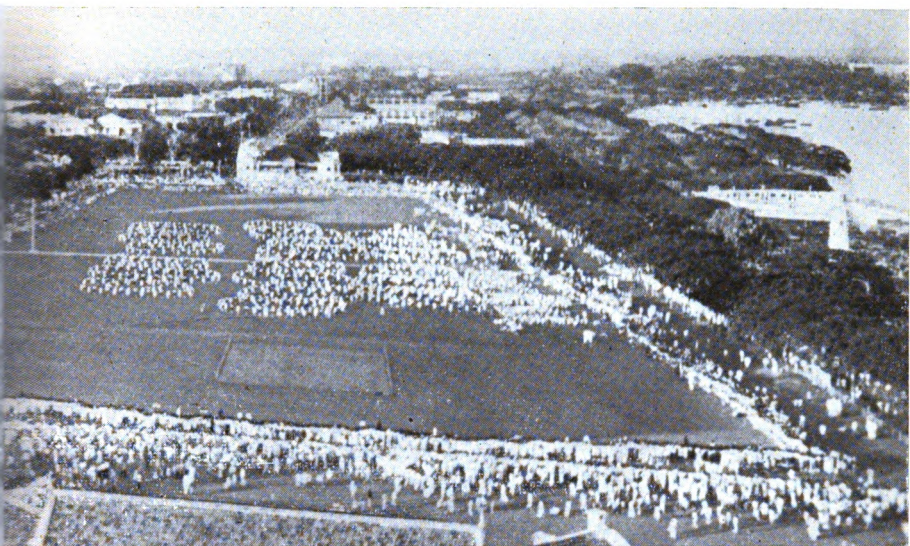
Standard

Their Royal Highnesses arrive at the Padang for the Youth Rally



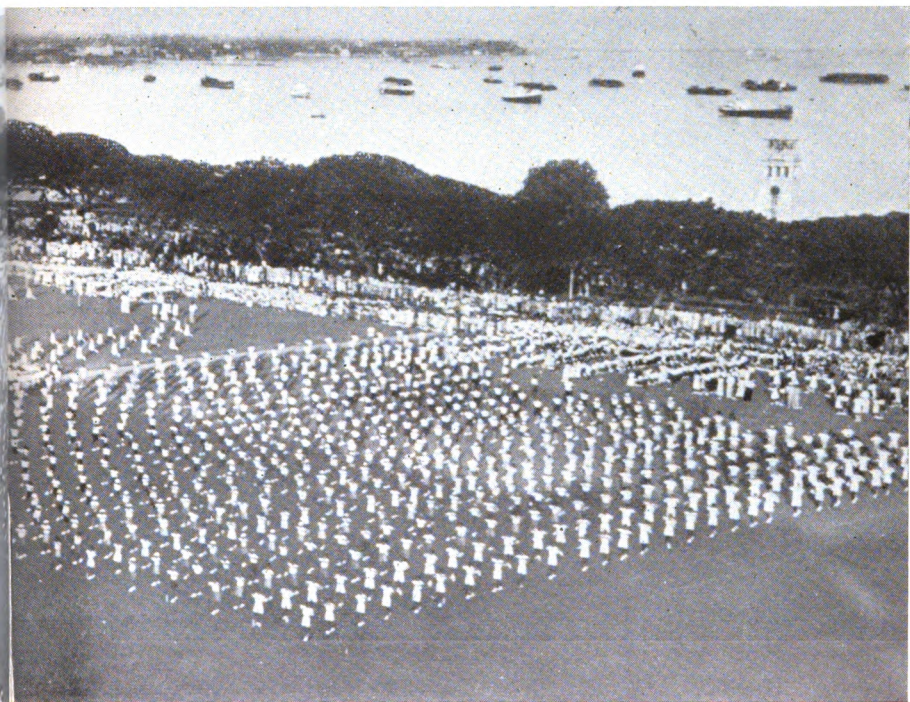
The great Youth Rally attended by over 20,000 chi





C. A. Gibson-Hill

ren which was presented in honour of the Duchess



Public Relations



Her Royal Highness talks to a member of the Royal Air Force Regiment (Malaya) and his wife
R.A.F. Public Relations



Command Public Relations

The Duke of Kent climbs into a Meteor of the Far East Air Force



Planet News

The Duchess waves goodbye to the Army



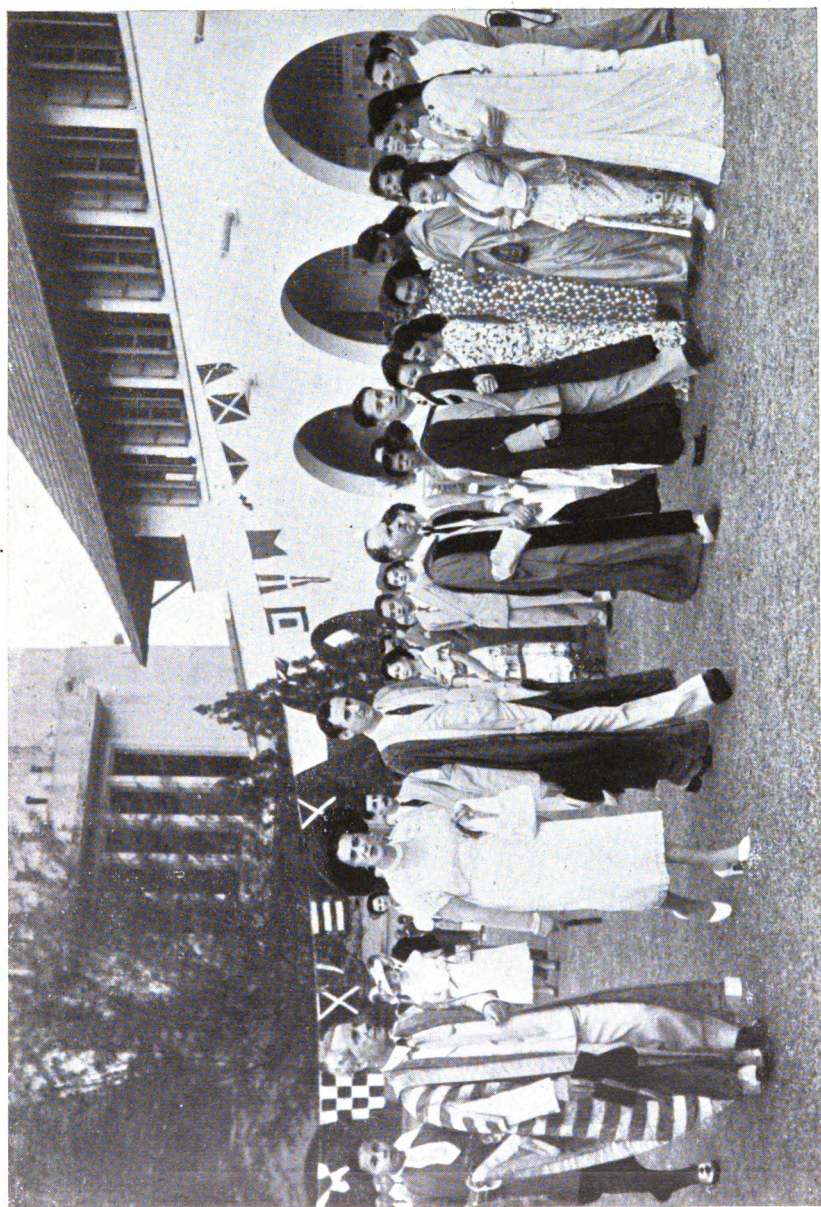
Wun Chak Lum

Her Royal Highness acknowledges cheers of schoolchildren lining the street.....



Straits Times

.....signs the Visitors' Book after opening the Royal Singapore Tuberculosis Clinic



The Duchess at the Garden Party held at the University of Malaya



Singapore Police

Her Royal Highness inspects the Police Guard at Government House



Public Relations

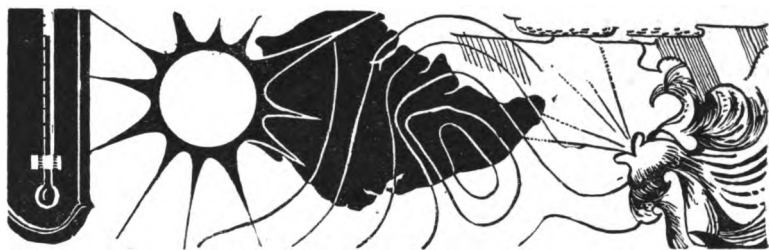
The Duchess with the Governor in the garden at Government House



Nanfang

Her Royal Highness waves goodbye to Singapore

PART THREE



XVI

Geography, Climate, Fauna and Flora

GEOGRAPHY

THE COLONY of Singapore consists of Singapore Island itself, with some adjacent islets, and Christmas Island and the Cocos-Keeling Islands in the Indian Ocean.

SINGAPORE ISLAND

Singapore Island is situated off the Southern extremity of the Malay Peninsula to which it is joined by a causeway carrying a road and railway. The straits between the island and mainland are about three-quarters of a mile wide. The island is some 26 miles in length and 14 miles in breadth, and about 224.5 square miles in area, including the adjacent islets. The City of Singapore is situated on the southern side of the island, in latitude $1^{\circ} 17'$ North and longitude $103^{\circ} 50'$ East. The municipal area (31.5 square miles) is administered by the City Council and the remainder of the island by the Rural Board. The former is primarily residential and commercial and the latter predominantly agricultural, though housing and industrial development is proceeding at a rapid rate outside the municipal boundaries.

CHRISTMAS ISLAND

Christmas Island lies in the Eastern portion of the Indian Ocean between latitudes $10^{\circ} 25'$ and $10^{\circ} 34'$ South, and longitudes $105^{\circ} 34'$ and $105^{\circ} 46'$ East. It is approximately 190 miles South of

Java Head and 530 miles East of the Cocos-Keeling Islands. The epithet is not distinctive, and there is at least one other island of the same name—a large atoll in the tropical Pacific which was discovered and named by Captain Cook.

Christmas Island has an area of about 64 square miles, with a maximum length from East to West of 13 miles, and from North to South of $11\frac{1}{2}$ miles. The greater part is occupied by a central plateau, 600 to 700 feet above sea level, rising in three places to low hills with maximum altitudes of 970, 1,060 and 1,170 feet. Round the edge it descends to the sea in a succession of terraces, separated by steep slopes or sheer cliffs. Initially the whole surface of the island was densely wooded, and even at the present time little of it has been cleared.

The island is composed entirely of a covering of coral limestone, the oldest portions of which date from the Eocene period, lying on a basis of basalt. It would seem to have been formed on the shattered cone of a long-extinct volcano. Originally this must have been completely submerged but with its highest portions, represented now by the three hill areas, sufficiently near to the surface for coral to grow and cover them. Subsequently it rose from the sea in a series of jerks, each separated by a pause long enough to allow the sections still in shallow water to acquire a fresh fringing reef.

The deposits of mixed phosphates, to which the island owes its economic importance, occur in three areas, each adjacent to one of the hills on the plateau. They must have been laid down initially in the form of guano, under conditions similar to those still occurring off the coasts of Peru and Chili—a scanty rainfall, and a great abundance of sea birds, far exceeding the interesting but modest numbers now present on the island. At this period the island must have lacked its present scanty covering of 'soil' and have been almost devoid of vegetation. The guano filled in the valleys between the irregular limestone ridges, where it now lies under a layer of six to ten feet of earth. The subsequent

increase in rainfall has failed to wash it away, but in the presence of moisture it has entered into combination with the rock dust permeating it, forming a mixture of phosphates, mostly with calcium as the base, in place of the original crude guano.

THE COCOS-KEELING ISLANDS

The Cocos-Keeling Islands lie between latitudes $11^{\circ} 49'$ and $12^{\circ} 12'$ South and longitudes $96^{\circ} 49'$ and $96^{\circ} 56'$ East. They are approximately 600 miles South-West of Java Head, and 530 miles from Christmas Island, the nearest point of land. The group consists of a low-lying atoll of about 25 islands surrounding a pear-shaped lagoon, 7 miles wide and 9 miles long, and a single, isolated island (North Keeling), 1,250 yards wide and 2,250 yards long, situated fifteen miles further North. The main atoll was visited by Darwin, who spent ten days there at the beginning of April 1836; he was then formulating his theory of the origin of coral islands, and Cocos is of some interest in that it was the only atoll which he ever examined personally.

The largest island in the main atoll (Pulau Panjang or West Island) is 5 miles long and about 2 furlongs wide, the smallest bun-shaped, with a diameter of about 50 yards. Only two islands have important settlements. One of these, Pulau Selma or Home Island, is the site of the native village. The other, Pulau Tikus or Direction Island, is occupied by a relay station on the submarine cable across the Indian Ocean. The Cocos-Keeling Islands, unlike the remainder of the Colony, were never occupied by the Japanese, and in the latter part of the war a large air-strip was laid down on West Island, and an important base established there. The air-strip was abandoned after the war, and much of the material removed, but during 1952 it was rehabilitated and enlarged and is now used as a link in the air route across the Indian Ocean from Australia to South Africa. All the islands in the group are thickly covered with coconut palms and the only export is copra.

CLIMATE

The climate of Singapore is characterized by uniform temperature, high humidity and copious rainfall. The variation of temperature throughout the year is very small and the excessively high temperatures of continental tropical areas are never experienced. Although the days are hot and, on account of the high humidity somewhat oppressive, the nights are almost always reasonably cool, and it rarely happens that refreshing sleep is not obtained. The average maximum temperature for the whole year is 87° F and the average minimum temperature 74° F. The average for any one month does not depart from the annual mean by more than 2° F.

There are no well marked dry and wet seasons. Rain falls throughout the year. Records for a number of years show that the average annual rainfall is 95 inches. December is the wettest month with a little over 10 inches while February, May, June, July and September are dry months, with between $6\frac{1}{2}$ and 7 inches. Rain falls on the average on one day in two.

The wettest year on record is 1913 with 135.92 inches and the driest year 1888 with 63.21 inches. Prevailing winds are Southerly from May to October and Northerly from November to April.

The total rainfall for 1952 recorded at the Meteorological Station at Kallang Airport was 113 inches, about 18 inches above the normal annual rainfall. January was the wettest month with 15 inches, about 5 inches more than the average for this month. The driest month was September with 4 inches, compared with the normal fall of 7 inches.

This year, 12.89 inches of rain fell during the month of August, which is usually one of the drier months. This is the highest August rainfall since 1917.

Temperatures were normal. The highest temperature recorded during the year was 91° F and the lowest 69° F.

FAUNA AND FLORA

THE FAUNA OF SINGAPORE ISLAND

Initially the fauna of Singapore Island must have been very similar to that of the wooded lowlands of Southern Malaya, but the developments of the last hundred years have impoverished it considerably. Much, though by no means all, of the mangrove remains, but the sandy stretches of the coast are no longer free and undisturbed. In the interior the original forest has been destroyed almost completely and replaced by lightly wooded country or densely populated urban areas.

The only section that has remained largely unchanged is an area of nearly twelve miles in the centre, lying across the East flank of Bukit Timah and including three artificial lakes which serve as reservoirs for the town water supply. The whole of this region has for long been reserved as a catchment area, where neither settlement nor tree-felling is permitted. In 1951 it was included in the areas designated as nature reserves in the Schedule to the Nature Reserves Ordinance, 1951, under which legislation a Board of Management has been established with full power to control and administer the reserves. Here, accordingly, there is still a considerable variety of wild life, but the area is too small to maintain many of the larger Malayan animals under natural conditions.

In general the birds and mammals now living wild on the island are restricted to the hardier and less retiring of the denizens of scrub woodland, small grassy areas and the forest edge. Less than a hundred years ago, at the time of A. R. Wallace's visits between 1854 and 1862, 'there were always a few tigers roaming about Singapore and they killed, on an average, a man every day'. The last authentic record of a local tiger was a beast shot on the island in 1924. The Sambar, *Rusa equina*, probably disappeared at about the same time, and the little Barking Deer, *Muntiacus muntjak*, during the recent war: the Banded Leaf-Monkey, *Presbytis femoralis*, the Berok, *Macaca nemestrina*, and the Wild

Pig, all of which were certainly present until after the turn of the century, have probably died out in the last 20-30 years. There are always a few pigs in a feral condition in the broken country at the West end of the island, and probably some in the catchment area, but these are almost certainly animals that have escaped from domestication or, in the case of the former locality, crossed the Johore Strait temporarily. There are still true wild pig and the *Berok* on some of the small islands South of Singapore, and it is known that the pig swim from island to island.

Less than fifty mammals are still known to be present on the island in a feral condition, and even these consist largely of rats (six species), squirrels (seven species) and bats (about twenty-four species)*. The latter include the so-called Flying Fox, *Pteropus vampyrus*, a large fruit-eating bat with a wing-span of nearly five feet, whose flesh is sometimes eaten by the Chinese. In addition there is a tree shrew, *Tupaia glis*, and a house or musk shrew, *Suncus murinus*, both of which are very common in their respective habitats, and a monkey, the Longtailed Macaque or Këra, *Macaca irus*, which is present wild in the Botanic Gardens in some numbers. This small selection covers all the mammals known to the great majority of the people on the island. The remaining species, though in some cases of considerable interest, are generally secretive and by no means common. They include two civets, a wild cat, at least one otter, two kinds of Mouse Deer, the Common Porcupine, the Scaly Anteater or Pangolin, the Flying Lemur and possibly the Slow Loris.

The bird fauna of the island is similarly restricted. About 156 different kinds of birds are almost certainly resident here, while a further 125 species have been recorded as strays or winter visitors: these figures are about half the totals for Malaya as a whole. In addition only about 70-80 of the residents can be regarded as at all plentiful, while about 50 are rare, or confined

*A full list of the birds known from the island up to the end of 1949 occurs in *Bulletin of the Raffles Museum* No. 21 (published January 1950). A list of the mammals was published in *Bulletin* No. 24 (1952).



Willow Leaves and Cicadas, Chinese scroll painting by Wu Tsai Yen



C. A. Gibson-Hill

Scene in the Botanical Gardens

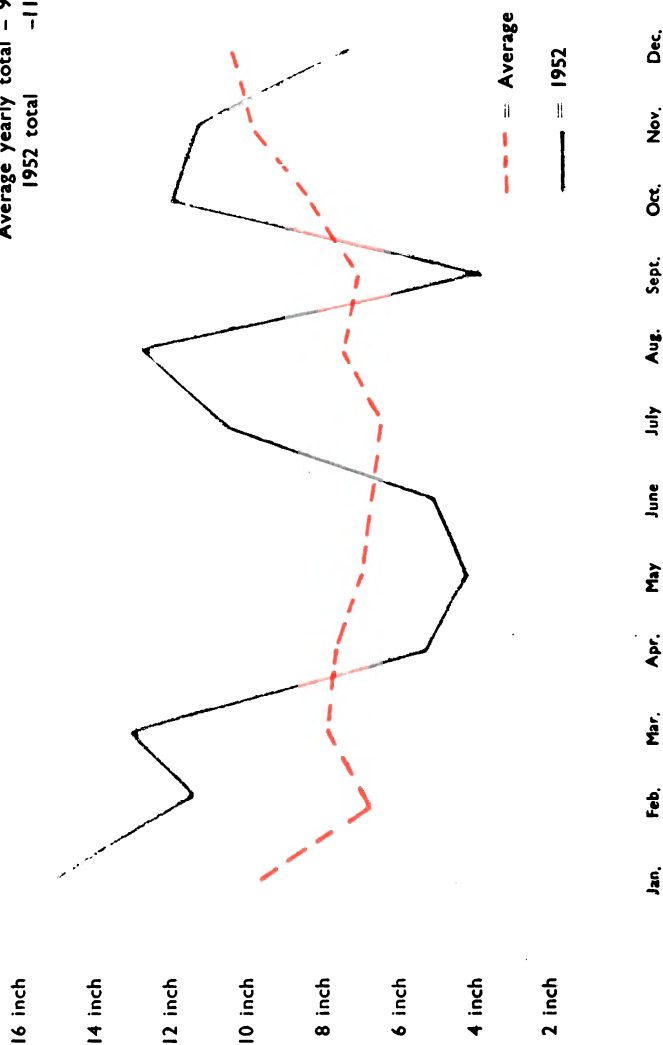


C. A. Gibson-Hill

The Singapore Art Society's Eleventh Inter-School Arts Exhibition

RAINFALL

Average yearly total - 95.5
1952 total - 113.5



Average rainfall over 82 years and Rainfall at Kallang Meteorological Station in 1952

to very limited habitats in the forest reserve or the mangrove zone. The common birds are mostly types found in grassland, open orchards and light woodlands on the mainland. In some cases, such as the Yellowvented Bulbul, *Pycnonotus goiavier*, the Magpie Robin, *Copsychus saularis*, the Whitebreasted Kingfisher, *Halcyon smyrnensis*, the Golden Oriole, *Oriolus chinensis*, the Longtailed Tailor-Bird, *Orthotomus sutorius*, and the Yellowbreasted Sunbird, *Leptocoma jugularis*, they are plentiful on the island. The Oriole and the Yellowbreasted Sunbird in particular are probably commoner here than they are anywhere else in Malaya. On the other hand such families as the pheasants, hornbills, trogons and whistling thrushes are completely unrepresented. Human interference, or at least the proximity of settlements, has probably had at least as much to do with their disappearance as the extensive deforestation. Several woodland birds are known from the little island of Pulau Ubin, in the Johore Strait, and even from the smaller islands in the Rhio Archipelago, though they are no longer present on Singapore Island itself.

The principal effect of man's activities has certainly been to impoverish the fauna. It is, however, interesting to note that several birds, including two species which are now common, have taken up residence here in the last fifty years, at least partly as a result of his presence and the changes that he has wrought. One of these is the Oriole mentioned above. The other is the Common Myna, *Acridotheres tristis*, which has apparently made its way down the peninsula from Tenasserim during the present century. In addition we have the little Java Sparrow, *Padda oryzivora*, the Javan Myna, *A. f. javanicus*, the Ceylon House Crow, *Corvus splendens*, and two bulbuls which arrived as caged birds and, escaping, have formed breeding colonies in parts of the island. Several other species have established themselves temporarily in this way and then died out again.

About 40 of the 125 non-resident birds occur regularly and in some numbers, either as visitors throughout the Northern

winter or as passage migrants: some, mostly shore birds, are very plentiful during the period of their stay here. The remainder only reach the area in very small numbers, occasionally, or as vagrants represented so far by only one or two records. In many respects the numbers of migrants and winter visitors are disappointingly small, both in terms of species and of individuals. It seems that the great movements of birds along the shores of the Malay Peninsula travel past to the East and West of Singapore, and miss the island itself.

Reptiles are well represented. Of the non-marine forms four tortoises, between fifteen and twenty kinds of lizards and over forty of snakes are probably still found here. The commonest tortoise is the Spiny Hill Tortoise, *Geomyda spinosa*, which is often encountered in the catchment area jungle. The most noticeable of the lizards are the little House Geckos or *Chichaks*, which astonish new-comers to the tropics by their ability to walk upside down on the ceiling. So far from retreating before the advent of civilisation these lizards flourish and multiply in houses, whose electric lights attract insects and furnish them with a copious artificial supply of food. In gardens and along roadsides the Flying Lizard (*Draco volans*) is quite often seen gliding on outstretched membranes from one tree to another and the Crested Tree-lizard (*Calotes cristatellus*), often miscalled 'Chameleon', is not uncommon. Malaya's largest lizard, the Common Monitor (*Varanus Salvator*) is still found in the less densely populated districts, and occasionally raids chicken-runs in the rural areas.

Of the surprisingly large total of snakes, six are venomous but only two of these dangerously so. These are the two Cobras, *Naja naja* the Black Cobra and *Naja hannah* the Hamadryad or King Cobra. The latter is the largest poisonous snake in the world and in July 1950 a specimen of 15 feet 7 inches was captured in the catchment area near the Island Golf Club. The Black Cobra is by no means rare, but extremely few cases of its bite are reported and it can be said with confidence that in Singapore

(and indeed throughout Malaya) the hazard of snake-bite need not be taken very seriously. Of the harmless snakes the House Snake (*Lycodon aulicus*) is the most frequently encountered and the beautiful black, green-spotted Paradise Tree-snake (*Chrysopelia paradisi*) is also very common. Pythons (*Python reticulatus*) are quite often captured but are usually not of any great size.

Frogs and toads are present in some variety. The Common Asiatic Toad (*Bufo melanostictus*) is abundant and furnishes students of biology at the University with an introduction to the technique of dissection. The author of the bellowing chorus that arises from swampy places in rainy weather is the so-called Bullfrog (*Caloula pulchra*). This species is said not to be native to Singapore but to have been introduced shortly before the beginning of the present century.

A considerable fauna of fresh water fish inhabits the island's ponds and streams, and especially the catchment area reservoirs. Many of them, by reason of their beauty and diminutive size, are favourites of aquarium keepers. Others are of interest from their peculiar habits; among these the celebrated Climbing Perch (*Anabas testudineus*) is worthy of mention. This fish possesses an accessory air-breathing organ which enables it to live for quite long periods out of the water provided it can keep its body and gill-chambers moist. In rainy weather Climbing Perches will deliberately leave the water and make their way across country in search of new dwelling places; in this way newly made ponds soon become colonised by them. One small fish, *Rasbora* *altior*, is quite common in the waters of the catchment area but has never been taken in any locality outside Singapore Island.

Of the terrestrial invertebrate animals little can be said beyond the fact that they are extremely numerous and varied. This is particularly true of the insects, and the catchment area jungle affords a rich hunting ground for the casual butterfly collector and the serious entomologist alike. A few of the invertebrates are noxious. The sting of the large scorpion (*Heterometrus*) and the poisonous bite of the big centipedes (*Scolopendra*) are painful and

severe but not to be regarded as dangerous. The Giant Snail (*Achatina fulica*) is a native of Africa but must now be accepted as a conspicuous, albeit unwelcome, member of the Malayan fauna. Introduced probably via Mauritius and Ceylon, it first made its appearance in Malaya about 1911. It is now a widely spread pest of gardeners and vegetable growers throughout South-East Asia and has even reached some of the islands of the tropical Pacific.

In conclusion mention must be made of the rich fauna found around the island's coasts. Fish, molluscs, crustaceans and many other animals occur in great variety, particularly as a number of distinct littoral environments are represented. These include gently shelving sandy and muddy shores and extensive mangrove swamps. Many of the islets south of Singapore have rocky shores and coral reefs border some of the more outlying of them.

THE FLORA OF SINGAPORE

When Sir Stamford Raffles first landed in Singapore nearly the whole island must have been covered by primitive lowland forest, with mangrove forest along the muddy coasts and along the banks of tidal creeks. Today most of that forest has disappeared, except for small patches such as those on Bukit Timah and in the water catchment area, but despite the great changes that have taken place, the abundant rainfall and absence of marked seasonal changes in Singapore ensure that there is no lack of the greenness and luxuriance which are such striking features of the vegetation of this region.

The original forest was much the same as that which covers large areas of the lowlands of the Malay Peninsula, a rich and complex association of trees, shrubs and climbers. A sample of it is to be seen in the Bukit Timah Forest Reserve, where many noble trees still stand and where the exceedingly complex nature of the flora can be appreciated. So complex is it that even in this small area, which has been a *locus classicus* of Malayan botany for nearly a century, and which has been considerably reduced in size in the past fifty years, new discoveries can still be made, not

of small and insignificant plants, but of large trees, one or two of which have been found in recent years to be new to science and several others to be new to Singapore Island.

The forest is evergreen, although it consists almost entirely of broad-leaved trees. There is no time during the year when the trees stand bare of leaves. Most trees continually drop a few leaves and keep renewing them. Some shed their leaves all at once, but they stand bare for a very short time and quickly reclothe themselves, and the odd individual here and there behaving in this manner does not alter the general evergreen aspect. There is also no fixed or general flowering season. Each kind of plant is a law unto itself and responds to climatic changes in its own particular way. The Pigeon Orchid, which is so familiar an object in Singapore with the sudden appearance of its fragile, white flowers all opening together, is a good example, although it is not a forest plant. It develops its flower buds to a certain stage and then rests, waiting for the sudden fall in temperature which accompanies a tropical rain storm. This starts the buds growing, and nine days later all the plants in the area affected by the storm bloom simultaneously. The gradual drop in temperature which occurs every night has no effect. Only a sudden change will pull the trigger.

First impressions of the tropical rain forest characteristic of the lowlands of Malaya are of the extraordinary numbers of different plants and of the paucity of flower. The forest floor is covered by a mass of seedlings, shrubs and herbs, with here and there a small palm and it is only occasionally that one sees any colour but green in a great variety of shades. A forest giant may have its head covered in flower, but very often the only clue is the carpet of fallen corollas on the ground beneath it. But although one may miss the colour that enlivens the spring woods in a temperate climate, there is much else of interest. There are the tall, straight, unbranched boles of the larger trees, some perched on stilt roots, some strongly buttressed, some cylindrical to ground level; the clusters of flowers and fruits springing from

the very base of the trunks of others; the strangling figs, which begin life by germinating high up in the fork of a tree, sending out roots which encircle the host in a basket work which gradually squeezes it to death, so that the fig establishes itself eventually in the ground, and the host which it replaces dies and crumbles away; the climbing palms or rattans with their formidable array of thorns and fish-hooks. Then there are the epiphytes, those plants which perch themselves on branches of trees wherever the roughness of the bark or a fork allows them to find a foothold and a place where debris can collect. Such epiphytes do not take nourishment from the host, as parasites do. They may damage their hosts, but only by weight of numbers, whereas true parasites, which are also common on forest trees, actually penetrate with their roots the tissues of their host and rob it of food. Although orchids and ferns are perhaps the commonest epiphytes, many other kinds of plant adopt the habit. One very interesting one in the Bukit Timah Forest was a *Rhododendron* which grew high up in the fork of an old and massive *Seraya*. This ancient tree fell down a few years ago, destroying the *Rhododendron*, which was probably the only plant of its kind on Singapore Island.

The mangrove forests, although little of them now remains, are much more interesting than a casual inspection would indicate. In contrast to dry land forest, mangrove consists of comparatively few kinds of trees, all of which are adapted to grow in salt water, and which, in fact, are unable to exist elsewhere than in tidal sea water, and then only in sheltered places where there is little wave action. Unlike inland forest, some of the mangrove species are gregarious, and this, along with the few species involved, accounts for the uniform appearance of any large area of mangrove. At low tide a tangle of stilt roots and breathing roots is exposed, sometimes so numerous that it is impossible to force one's way through them. The curious fruits are noticeable, for the root grows out of the fruit while it is still attached to the tree and may reach two or three feet long.

When the fruit eventually does fall, the long root bores into the mud and anchors the seedling. Associated with the mangrove and growing with it in tidal swamps are two palms, the tall, graceful *Nibong* with its strongly spiny stem and the *Nipah*, a stemless palm with very large stiff leaves.

Besides lowland and mangrove forests, other types of original vegetation are represented here and there. In the Seletar and Mandai districts there are patches of freshwater swamp forest very like that which covers vast areas in South-East Johore. The plants characteristic of the sandy East coast beaches reach Changi and the islands in that neighbourhood. The cliffs at Labrador, at the Western approaches to Keppel Harbour, are covered by a scrub in which grows a most interesting fern called *Dipteris conjugata*, one of those ancient plants which overseas botanists are always anxious to see alive and in its native habitat. This has been found at two other places, by the sea, in Singapore Island, but nowhere else in the country, perhaps nowhere else in the Malaysian region, is it found at sea-level.

An estimate of the numbers of the native flora of Singapore gives a figure of about 2,300 species, including grasses, sedges and ferns, but excluding mosses, lichens, fungi and other lower forms of plant life. About 180 of this number are orchids, but with the destruction of most of the mangrove forests, many orchids which were epiphytic on mangrove trees have disappeared. Some of the forest plants, too, are no longer to be found, and must be considered extinct.

Forest, of course, is no longer the dominant feature of the vegetation of Singapore Island. Outside the urban areas, rubber and coconut plantations, orchards and vegetable farms are to be found wherever the soil is suitable for them. There are however areas of secondary growth where long ago the forest was cut down and where cultivation has now been abandoned. The gambier and pepper planters, about the middle of last century, exhausted the soil of many acres in Singapore and moved away

to lay waste other areas. After them came that universal pest, lalang grass, which establishes itself very rapidly and very thoroughly in any open abandoned space. It cannot tolerate shade, so that, if it is not set on fire, it is gradually replaced by a dense growth of soft-wooded shrubs and small trees. But fire encourages it by killing all other plants, leaving the underground runners of the lalang untouched. Extensive lalang areas are not now so common as they used to be. Evidence that they did cover much larger areas is to be seen in the roadside avenues of trees of *Jambu laut* (*Eugenia grandis*) which still exist. This tree was largely planted in the eighties of last century to check grass fires, for it does not burn readily.

Although these expanses of scrubby secondary growth look barren and uninteresting, they contain a surprising number of species, some of them well worth study. One of the most curious is *Nepenthes*, the Pitcher Plant or Monkey Cup, of which at least three species are common in Singapore. They are scrambling plants, furnished with oddly shaped and colored hollow pitchers which dangle from the leaf-tips or are seated on the ground. The pitchers are elaborately designed to trap and drown insects, which are gradually absorbed and form part of the food requirements of the plant.

If secondary growth is left untouched, the seeds of forest trees, distributed by animals or birds or by the wind, may find the shady, moist conditions that they must have to germinate and survive, so that primitive forest may eventually re-establish itself. This is an exceedingly slow process. On Singapore Island, with the ever increasing pressure of its expanding population, there is very little likelihood of any such change being observed. We shall do well if we are able to keep intact the remaining relics of the native vegetation for the benefit of our students and lovers of nature.

The clearing away of the original forest and the establishment of farms, plantations and gardens has allowed the entry of many alien plants. Many of these have been introduced accidentally,

many as food or ornamental plants, and, finding congenial conditions, proceed to run wild, often with surprising vigour. Some are now so well established that it is hard to believe that they are not native. The very common Mimosa, or Sensitive Plant, is an American which has been in Singapore for well over 100 years; and the common Lantana is also an alien and also American. It is interesting to find that so many of our weeds and food plants are American in origin. The centre of distribution of these plants for South-East Asia seems to have been the Philippines. It is thought that the plants were brought from the New World by the Acapulco galleons trading between the Pacific coast of Mexico and the Philippines, when these islands were under Spanish rule.

Even today, although the entry of foreign plants is carefully watched, mainly because noxious plant diseases must be kept out, aliens do manage to evade regulations and quarantine. These intruders are usually quite inoffensive, such as the two grasses discovered in 1950, both of them previously unknown in Singapore.



XVII

History of Singapore

IN 1819, at the beginning of the year, six ships of the Honourable East India Company lay off an island in the Straits of Malacca. From these on 28th January a small boat put off carrying two white men and a sepoy guard. One of them, though not yet 38, had already made his mark in the world. He had saved Malacca from destruction, he had suggested the conquest of Java and ruled that island as Lieutenant-Governor for five years, he had been censured by the Company and knighted by the Prince Regent; he was now Lieutenant-Governor of the moribund settlement of Bencoolen in Sumatra and commissioned, at his own suggestion, by the Governor-General of India to establish a trading station in Riau or Johore. His name was Thomas Stamford Raffles.

The boat nosed its way up a mangrove-lined creek till it reached a clearing where stood some fifty attap huts and a somewhat larger house, the residence of the Temenggong, the Malay governor of the island. The Temenggong met the white men as they landed, with gifts of fruit: through the hot mid-day hours they talked in the cool dimness of the chief's verandah: and when Raffles put back to his fleet the foundation of the Colony of Singapore had been laid.

The Temenggong would treat but was nominally a subordinate, and Raffles sent for Tengku Husein, Sultan *de jure* of Johore-Lingga, though supplanted with Dutch connivance by his younger brother. Husein, too, would treat and on 6th February the Sultan and Temenggong agreed to the building of a British factory on Singapore Island and equally to exclude from their territories all other powers. Raffles' 'political child' was born.

Henceforward, Raffles was to refer to 'my city of Singapore'. He was richly entitled to do so. It had been his researches which had informed him of the forgotten past of the island, of the prosperous commercial centre which had flourished there under the name of Singapura, the 'Lion City', in the thirteenth and fourteenth centuries, and had been destroyed by the Javanese in or before 1377. It was his imaginative power which had revealed to him the immense strategic and commercial value of its position commanding the southern entrance to the Straits and on the most direct route to the Far East.

It was his strong commonsense which told him that men commonly dislike restrictions, especially in trade, and led him to enunciate that economic principle of the 'free port' upon which the foundations of Singapore's prosperity were laid. It was his self-confidence and audacity which prompted him to an action which he knew must provoke general and bitter opposition. Nor was he mistaken. The Dutch protested forcibly against the interloper. Colonel Bannerman, the Governor of Penang, timorous and jealous, foresaw the blackest disaster. The East India Company directors in Leadenhall Street were apprehensive, and stated their objections to the Governor-General, Lord Hastings. He had no liking for the situation, but since the thing was done it had better remain so, and he had no use whatever for the threats or claims of the Dutch.

So no decision was taken and meanwhile, though Raffles himself was struggling with derelict Bencoolen, his off-spring began to speak for itself, and with authority. No more than 150 when

Raffles landed, the population rose to over 10,000 by 1824. Trade, hitherto non-existent, by 1820 far excelled that of Malacca. In 1822 the value of imports and exports was \$8,968,151; in 1823 it had jumped to \$13,268,397. Patently this infant prodigy was an asset which could not be surrendered.

Nor was it. By the Treaty of London, 17th March, 1824, Holland withdrew its objections to the occupation of Singapore and ceded Malacca, while Britain gave up Bencoolen and all the Company's possessions in Sumatra. At the same time British sovereignty in Singapore was placed on a sound juridical basis by a treaty with the Sultan and Temenggong on 2nd August, 1824 which ceded to the East India Company the Island of Singapore in full sovereignty and property.

Meanwhile, in 1822-3, Raffles had paid his last visit to Singapore and, working with his usual titanic energy, had endowed it with a magistracy, a code of laws and a police force, trading regulations and a town-planning scheme, and, as he hoped, an institution which would make Singapore the intellectual as well as the commercial entrepot of South-East Asia. In 1824 he returned to England where he died in 1826, not yet 45.

In the succeeding years the phenomenal progress of his creation showed no sign of diminution. The trade figures were £2,610,440 in 1825, £13,252,175 in 1864. The population which at the first census in 1824 numbered 10,683, had risen by 1860 to 81,734 of all nationalities, but with a significant majority (over 50,000) of Chinese. Singapore had completely overshadowed its sister settlements of Malacca and Penang, with which it had been incorporated in 1826 as the Straits Settlements, and it was natural that the seat of government should be transferred from Penang to Singapore in 1832. Singapore was doing well but, thought its inhabitants, could do better: and the drag on its further progress was the fact that it was an outlying possession of a distant government in India, which did not consult local interests.

The Straits Settlements had been put under the Presidency of Bengal in 1830 and transferred to the direct control of the Governor-General in 1851. It was all one to Singapore: it disliked in increasing measure government from India and in the fifties its discontent became vociferous. It complained in general that the supreme government sacrificed the interests of the Straits Settlements to those of India: in particular that it interfered with the currency to the detriment of trade, that it sought continuously to infringe the sacred principle of the 'free port' by revenue-producing devices, and above all that by its policy of strict non-intervention with the Malay States of the hinterland, it held back the Singapore merchants from developing a large territory of great potential wealth but now so sunk in irremediable anarchy as to render regular trade impossibly hazardous.

The Government of India, for its part, was quite willing to let its wayward dependencies depart in peace. Prosperous the Straits might be, but so low was the taxation that they were actually a burden on the Indian Government. Moreover since the abolition of the Company's monopoly of the China trade in 1834 India was no longer interested in the Straits; it was difficult to find suitable officials for the territory and protection in war was impossible. By all means, therefore, transfer the Straits Settlements to the Colonial Office. So reasoned the Viceroy, Lord Canning, in 1859, and in 1860 the transfer was agreed in principle. To settle the details was another matter. In addition to the parties to the transfer, the War Office and the Treasury were involved, and it was not until 10th August, 1866, that an act was passed to transfer the control of the Straits Settlements from the Indian Government to the Colonial Office. On 1st April, 1867, the transfer was formally effected and the Straits Settlements became a Crown Colony.

The proximate result was the dropping of the policy of non-intervention and the inauguration of a policy of protection and guidance in the native states of the peninsula which in a few

decades converted an unhealthy, sparsely-populated and anarchic country into the most prosperous and best developed of all Britain's tropical dependencies. In this development Singapore played a primary part and in the resultant prosperity she had her share. It was in Singapore that European processes of tin smelting were introduced in 1887 with the result that in 1939 Singapore smelted more tin than England and Holland combined. It was in Singapore and in Perak that *Hevea Brasiliensis* was successfully cultivated in 1877; it was the Director of Singapore's Botanic Gardens, Mr. Ridley, who in 1891, first exhibited cultivated rubber to the public, and though Singapore grew comparatively little rubber itself, it became the chief rubber export centre of the world and in 1918 out of a total trade of \$512,229,753 the value of rubber exported was \$153,455,920. Population followed prosperity in a continuous upward curve: a century after Raffles' landing the population within the municipal limits was estimated at 305,000; in 1931 it was 559,945 of whom 74.9 per cent were Chinese. In 1952 the total population of the Colony of Singapore was estimated at 1,077,155 of whom 77 per cent were Chinese.

With justice could the Singapore Chamber of Commerce refer in 1919 to 'the wondrous growth of the trade of the Port'. In that respect Raffles' expectations had been fulfilled completely. But in two major respects his aspirations remained ungratified.

His strategic eye had not failed to perceive the key position of Singapore or the vital line of trade and communications which runs through the Mediterranean and Indian Ocean to China and the Antipodes. Singapore, he wrote, will become the Malta of the East. But prior to the 1914-18 war little resemblance was apparent. In 1873 indeed Singapore was described as 'defenceless' and though the adjacent islands of Blakang Mati and Pulau Brani were subsequently fortified, the garrison of Singapore in 1914 consisted of no more than the equivalent of two battalions, while from the naval point of view it was no more than a port of call and coaling station.

The emergence of Japan as the third naval power in the world fundamentally altered the strategic situation. Japan had hitherto been an ally, but was known to have wavered in 1918 and to entertain aspirations which must bring her into conflict with British interests. The protection of the Indian Ocean and of the Antipodes necessitated the presence of a battle-fleet in Eastern waters: a battle-fleet required a naval base with adequate docking facilities and there existed none such from Malta to Pearl Harbour. So in 1921 the Imperial Conference decided that Singapore should become, as Raffles had foreseen, the Malta of the East. By 1938 a first class naval base had been constructed with graving and floating docks to accommodate the largest capital ships. An air base was established, the garrison multiplied and the peaceful commercial city was transformed into a fortress. But Singapore differs from Malta in one essential particular, in that it has an extensive hinterland from which it is separated only by a narrow strait. Lacking naval and air support the fortress succumbed to a Japanese land attack in February 1942. For three and a half years Singapore, under the alias of Syonan, remained perforce under Japanese rule. On 5th September, 1945, the forces of South-East Asia Command under Lord Louis (now Viscount) Mountbatten, fresh from their great victories over the Japanese in Burma, bloodlessly recovered Singapore, largely intact but shabby and despoiled, and with its people starving.

For almost seven months Singapore remained under the British Military Administration, but civil government was resumed on 1st April, 1946, with Singapore no longer part of the Straits Settlements, but constituted as a separate Colony, together with Christmas Island and the Cocos Islands. Penang and Malacca became part of the new Malayan Union (now the Federation of Malaya), and Labuan became part of North Borneo. It had, however, been clearly stated in a White Paper submitted to Parliament in January 1946 containing the proposals for these constitutional changes that it was 'no part of the policy of His

Majesty's Government to preclude or prejudice in any way the fusion of Singapore and the Malayan Union in a wider union at a later date should it be considered that such a course were desirable'.

Singapore's development in democratic government has continued steadily. In March 1948, the first elections for the Legislative Council took place when six members were elected by popular vote and a further three elected by the three Chambers of Commerce. The Council had a majority of unofficial members, including four nominated by the Governor, and was admitted to membership of the Commonwealth Parliamentary Association in 1949. By the time of the elections in March 1951, the number of popularly elected members had been increased from six to nine, and the Council elected one of its unofficial members to be its vice-president. The Constitution was further amended to permit the unofficial members of the Legislative Council to elect two of their number to the Executive Council. At the end of 1952 consideration was being given to a further increase in the number of elected members of the Legislative Council, and to the election of a Speaker.

Democratic development has not been confined to the Legislative and Executive Councils. The first Municipal Elections were held in March 1949, when eighteen out of a total of twenty-seven Municipal Commissioners were elected by popular vote. In September 1951, the title of a City was conferred by Royal Charter and the Municipal Commission became the City Council.

In the rural areas, the village committees which came into being in 1946 and 1947 became rural district committees and provided a useful link between the inhabitants and the Rural Board.

This constitutional progress has taken place despite what is known as the Emergency. Early in 1948, the leaders of the Malayan Communist Party decided to switch the main emphasis of their policy from penetration of workers' movements to a

campaign of violence, and in April of that year the campaign opened both in Singapore and the Federation of Malaya, with the result that special emergency powers were taken by the Governments of both territories. Many leaders of the Party in Singapore whose main occupation had been the fomenting of industrial disputes in Singapore went to the Federation to join their comrades in the jungle in the campaign of armed terrorism which still continues. The manifestations of this campaign though not as serious or as spectacular in Singapore as in the Federation included cases of murder and arson, and it has needed constant vigilance and the use of the emergency powers to keep the threat in check, and to disorganize the control centres of the local Communist organization as they regrouped from time to time. Fortunately, it is possible to record at the end of 1952 that there are signs that the tide has turned and that we may look forward before too long to the time when the democratic progress of our institutions can proceed without the restrictions inevitably inherent in the organization necessary for the combating of a campaign of terrorism.

'Education,' wrote Raffles in 1823, in a minute which should be more famous than Macaulay's, 'must keep pace with commerce in order that its benefits may be ensured and its evil avoided'. He advocated therefore the establishment of a college to educate the higher classes of the native population and to facilitate research into the 'history, condition and resources' of South-East Asia. When he left in 1823 the foundation stone of his institution was laid and a liberal endowment provided. But the conception was too lofty for his successors, the endowment was dissipated, and only in 1837 was the institution put to use as a school. For a century education languished and in 1919 the editor of the *Straits Times* could write of the 'deplorable' condition that existed in this respect.

One very important step had been taken in 1905 when a medical school was established which developed into the King Edward VII College of Medicine. But it was not till 1918 that a

committee appointed to make recommendations for the celebration of the centenary of Singapore unanimously reported 'that the most suitable memorial is a scheme which will provide for the advancement of the education of the Colony with a view to laying securely the foundations upon which a university may in course of time be established'. From this report proceeded Raffles College which was opened in 1928 as a centre for higher education of a university standard. The union of Raffles College and the King Edward VII College of Medicine into the University of Malaya came to pass in 1949 and that last and most resplendent of Raffles' visions of Malaya as the cultural centre of South-East Asia has been fulfilled.

NOTES ON THE HISTORY OF CHRISTMAS ISLAND
AND THE COCOS-KEELING ISLANDS

Christmas Island

Christmas Island was discovered and named by Captain William Mynors of the *Royal Mary* who sighted it on Christmas Day, 1643, while on a voyage from Java to the Cape. The earliest recorded landing is that of a party sent ashore by William Dampier in 1688, but the island remained little known, and was seldom visited, until the latter part of the nineteenth century. The first official attempts at exploration were made by men landed from H.M. ships in 1857 (H.M. Frigate *Amethyst*), January 1887 (H.M. Surveying-vessel *Flying Fish*) and October 1887 (H.M. Frigate *Egeria*).

The reports arising from these visits were unpromising, but some of the geological specimens brought back by the *Egeria* were found to be almost pure samples of phosphate of lime, and the British Government decided to annex the island as the result of representations made by Dr. (later Sir) John Murray, to whom the specimens had been submitted for examination. In June 1888 Captain H. W. May of H.M.S. *Imperieuse* landed at Flying Fish Cove, on the north side of the island, and formally declared it to

be part of the British Dominions, under the immediate jurisdiction of the Government of the Straits Settlements. In November the same year Andrew Clunies Ross, a younger brother of the owner of the Cocos-Keeling Islands, established a small colony of Malays on the shore of the cove.

Dr. Murray had applied to the British Government for a lease of the island in April 1888, when he was urging its annexation, but no decision was reached in the matter. Later George Clunies Ross addressed a formal petition to the Governor of the Straits Settlements, based on the fact that members of his family had established themselves there. The question was not settled until February 1891, when the British Government granted the two claimants a joint lease for ninety-nine years. Six years later, following discussions in London, both parties agreed to make their leases over to a Company, to be formed and registered in London, under the name of 'The Christmas Island Phosphate Company', with the object of working the rich deposits. The shares were restricted to 1,500 of which each took 750.

Extensive work on the opening up of quarries on the North side, near to Flying Fish Cove, began early in 1897. The following year 200 Chinese labourers, the fore-runners of a large labour force, were brought to the island, and in August 1900 Andrew Clunies Ross left, taking with him the last of the Cocos-Keeling Malays. Early the same year the first consignment of phosphates was put on board ship by means of lighters, and the island's exports began. About the same time L. H. Clayton, the first District Officer, assumed duty, his presence being rendered desirable by the rapidly expanding labour force.

Prior to 1888 Christmas Island was probably the only existing tropical island of any large extent that had never been inhabited by man. Its interest from a scientific point of view was further increased by the fact that it is at least 190 miles from any other land, and is surrounded by an ocean in which the depths exceed three miles. In consideration of these points Sir John Murray

offered in 1896 to pay for a zoological and botanical survey of the island, before it should be too much disturbed by exploitation. The British Museum of Natural History agreed to second Dr. C. W. Andrews for this work, and the latter spent over ten months on the island from July 1897 to May 1898. During this period he accumulated a valuable series of natural history and geological specimens which now form part of the national collections at South Kensington. On his return he prepared an elaborate monograph embodying the results of his investigations, which has been described as the best published account of an oceanic island. In 1938-40 an attempt was made on behalf of the Raffles Museum to repeat the zoological section of Dr. Andrews' work, with the object of extending its scope and recording the possible changes in the fauna in the intervening fifty years. Unfortunately a large portion of the specimens and data obtained disappeared from the Museum during the Japanese occupation of Singapore and before any record had been made of them. Such materials as remained was published by the Museum in a special *Bulletin* in 1947.

By the beginning of the 1914-18 war the greater part of the phosphate that could be extracted easily had been taken from the quarries on the North side of the island, and it was becoming increasingly difficult to work them satisfactorily. Subsequently the world shortage of shipping reduced the volume of the Company's exports, and the opportunity was taken to drive a railway 11 miles across the central plateau to the southern point, and to uncover the extensive beds existing there. These alone have been utilized since 1920, and a rich harvest was gathered from them during the inter-war period.

Christmas Island was occupied by the Japanese in February 1942. A scorched-earth policy was carried out prior to their arrival and this, combined with their own shipping difficulties, rendered the island unproductive during their stay there. The preparation of phosphate for export was rapidly resumed after the war. On the 1st January, 1949 the Christmas Island Phosphate

Company's undertaking was purchased by the Governments of Australia and New Zealand, on whose behalf the Christmas Island Phosphate Commission was established in February this year.

The principal settlement on Christmas Island is at Flying Fish Cove where the main installations of the phosphate industry are located together with quarters for the European, Chinese and Malay employees. There is a secondary settlement at the phosphate workings at South Point about twelve miles distant.

Mechanized methods are used for mining the phosphate which is taken from the working face by motor trucks to a field screening and crushing plant. After treatment it is transported in railway trucks of twenty-five tons capacity by modern diesel electric locomotives to a point above the drying and storage installations at Flying Fish Cove. It is then lowered down an incline railway to the shore level and thence delivered to oil-fired rotary dryers where excess moisture is removed prior to the phosphate being conveyed to storage bins to await shipment. Phosphate dust is drawn off during drying operations and is subsequently packaged in paper bags for shipment to Singapore or Port Swettenham.

The island has no harbour and vessels to be loaded are moored off shore in Flying Fish Cove and then breasted close in to a direct loading plant fed by a belt conveyor system from the storage bins.

Production has progressively increased since the island was re-occupied and for the 12 months ended 30th June this year, bulk phosphate shipments totalled 327,050 tons and bagged phosphate dust shipments 25,447 tons.

The Cocos-Keeling Islands

The isolated Northern island of the Cocos-Keeling group is traditionally believed to have been discovered by William Keeling, a merchant captain of the East India Company, while homeward bound from Bantam in 1609. The islands remained unowned and uninhabited until the end of 1826 when Alexander

Hare, an English adventurer, and later John Clunies Ross, a Scottish seaman, established small settlements at different points on the main atoll. Hare, who had been British Commissioner for Borneo during Raffles' administration of the Dutch territories, claimed to hold extensive concessions in the neighbourhood of Banjarmassin, granted him by the Sultan. Ross, the eldest son of a Shetland family, went to sea with the Greenland whaling fleet at the age of thirteen, and subsequently, after serving in the Pacific, worked under Hare in Borneo and afterwards as captain of a trading vessel owned by Hare and his brothers. He seems to have decided to settle on the Cocos-Keeling Islands about 1824, and at the end of 1825, when homeward bound from Bencoolen, he made a preliminary landing and planted a number of seeds and shoots which he had brought with him from Sumatra. He returned to the atoll, with his wife and family, and a small number of colonists from England, early in 1827, and there found Hare in occupation.

The leaders of the two groups did not see eye to eye and each sought his own champions to support his claim to ownership of the islands. Finally, about 1831, Hare returned to Java, leaving Ross and his heirs in sole possession. The official recognition for which Ross had asked was not granted until 1857, when Captain Freemantle of H.M.S. *Juno* formally declared the group to be part of the British Dominions. In 1878 responsibility for their supervision was transferred from the Colonial Office to the Government of Ceylon, and in 1882 to the Government of the Straits Settlements. Finally in 1903 they were officially incorporated in the Settlement of Singapore*.

From the earliest days the economy of the settlement has been based entirely on the coconut palm. Fish are plentiful in the lagoon, but all rice and similar foodstuffs has to be imported and, like clothing and other semi-essentials, paid for from the sale of copra and other coconut products. Conditions seem to have been

*Ordinance No. 84 of 25th September, 1903, 'to provide for the better administration of the Cocos Islands'.

very difficult at first, and it was not until the last quarter of the century, under the leadership of the third Ross (George Clunies Ross, who succeeded his father in 1871), that the community really prospered. In the eighteen-nineties the island had a population of about 500–600 persons, and in good years was exporting as much as £25,000 worth of copra a year, at a time when the pound sterling was worth money in the East. In 1901 a relay station in the submarine cable across the Indian Ocean was established on Pulau Tikus, at the North end of the main atoll. The presence of the station has had little effect on the prosperity of the islands, but it has much increased their importance, especially in wartime.

Favourable conditions continued until 1909, when the islands were struck by the worst cyclone in their recorded history: about 400,000 coconut palms were uprooted or decapitated, and the accompanying tidal wave left only five buildings standing. Five years later they lost their trading schooner, the *Ayesha*: she was stolen by the landing party from the German cruiser *Emden* to make their escape after their own ship had been sunk by H.M.A.S. *Sydney* off North Keeling. As a result of these two disasters the islands were not able to share adequately in the wartime copra boom. Subsequently, in the inter-war period, the population increased steadily, while the exports increased in quantity but dropped in value. During the latter part of this period the islands were to a large extent supported by the income which the fourth Ross (John Sydney, who succeeded his father in 1910) obtained from his shares in the Christmas Island Phosphate Company.

A small garrison was established at the North end of the main atoll in 1941, to protect the Cable Station, but it was withdrawn after the fall of Singapore. Nevertheless the Japanese never put a party ashore, though they bombed the islands and damaged the buildings of the station. The unsupported bombing did them little good, and cable communication was continued with the aid of reserve equipment rigged up under the ruins of the houses.

J. S. Clunies Ross died in August 1944. His heir was a boy of sixteen in England, and a military administrator was therefore appointed to take charge of the islands. He remained in control until April 1946, when the civil administration was re-established. By the end of the war the population had passed the 1,800 mark, and with little likelihood of copra ever reaching a price that could support so many people the fifth owner (John Cecil Clunies Ross) reversed the policy of his predecessors, and a scheme was devised under which all islanders who wished to do so were assisted to emigrate. Small numbers elected to go to Christmas Island and Singapore, but the majority have chosen to resettle in North Borneo, where employment has been found for them on hemp and tobacco estates near Tawau and Lahad Datu. Emigration has now been completed and only some 350 persons have decided to remain on the islands.



XVIII

Administration

THE COLONY of Singapore is constituted by the Singapore Colony Orders in Council, 1946 to 1952. These and the Royal Instructions of 27th March, 1946, as amended from time to time together provide for:—

- (a) a Governor and Commander-in-Chief appointed by Commission under Her Majesty's Sign Manual and Signet;
- (b) an Executive Council consisting of the Governor as Chairman; four *ex officio* Members (namely the Colonial Secretary, the Attorney-General, the Financial Secretary and the President of the Municipal Commissioners (now the City Council)); two Nominated Official Members; four Nominated Unofficial Members; and two Elected Members elected by the Nominated Unofficial and Elected Members of the Legislative Council from among themselves;
- (c) a Legislative Council consisting of the Governor as President; four *ex officio* Members (as for the Executive Council); five Nominated Official Members; not more

than four Nominated Unofficial Members; and not more than twelve Elected Members, of whom, under the provisions of the Singapore Legislative Council Elections Ordinance, 1947, nine are elected by popular franchise in single-member Electoral Districts, one by the Singapore Chamber of Commerce, one by the Chinese Chamber of Commerce and one by the Indian Chamber of Commerce.

It is provided that in the Governor's absence a Deputy President (who at present is the Elected Member for the Chinese Chamber of Commerce) shall preside at meetings of the Council;

- (d) a Supreme Court, with unlimited civil and criminal jurisdiction, which is a Court of Record, and Courts subordinate to the Supreme Court and Courts of special jurisdiction to be constituted by laws made under the provisions of the Orders in Council.

The public affairs of the Colony are administered, under the direction of the Governor in matters requiring submission to him, by the Colonial Secretary and his staff; District Officers are stationed in Christmas Island and the Cocos-Keeling Islands.

The First Legislative Council under the new Consitution of 1946, which provided for not more than nine Elected Members, was inaugurated on the 1st April, 1948, and dissolved on the 17th February, 1951. The Constitution having been amended, elections for twelve Elected Members were held in March 1951. The same three Members as had represented the Chambers of Commerce in the First Legislative Council were returned by their respective Chambers; and of the nine Members returned by the Electoral Districts, six were members of the Progressive Party, two members of the Labour Party and one an Independent. The Second Legislative Council was formally opened on the 17th April, 1951.

The total electorate registered for this election was 48,155 and 25,056 voters went to the polls.

Consideration was given to the question of increasing further the number of elected representatives on the Legislative Council and during 1952 the Governor appointed a committee consisting of all the Unofficial Members of the Legislative Council to examine this question and to make recommendations for such increases in the elected representation as are deemed desirable at the present time. This committee was also asked to examine the question of the revision of the limits of the existing constituencies in relation to the question of creating new ones, and to make recommendations on the desirability of the appointment of a Speaker. The committee's report had not been received at the end of the year. A second committee was appointed to examine the existing legislation and machinery governing the compilation of the Electoral Roll and the system of registering votes and to make recommendations for such changes as it considered necessary. This committee also has not yet made its report.

The resignation this year from the Legislative Council of the Member for a rural district made a by-election necessary. On Nomination Day, 19th November, 1952, only one candidate, an Independent, presented his papers, and was returned unopposed.

Local administration of the municipal area is exercised by the City Council, which is composed of twenty-seven members under an official President nominated by the Governor after consultation with the councillors. Nine councillors are nominated by the Governor at his discretion and eighteen are elected from six wards in annual elections. Councillors serve for a period of three years, one-third retiring in December each year.

Twenty candidates (Progressive Party, 6; Labour Party, 4; Independents, 10) contested the six seats in this year's election

to the City Council which was held on the 6th December. The poll was taken at 55 polling stations and 22,904 persons voted, representing 51 per cent of the registered electorate. Four Progressive Party candidates, one Labour Party candidate and one Independent were returned.

As qualifications for the two franchises are not identical, separate registers of the electorates for Legislative Council and City Council elections are kept by the Supervisor of Elections and these are revised annually. This year's revision began on 15th April and ended with certification of the registers on 15th September. Valid applications for registration as voters were made by 22,744 persons (3,027 more than in 1951), and as a result 20,074 names were added to the Legislative Council register and 18,859 to the register for the City Council. Of the new applicants, 19,356 were men and 3,388 women; 19,911 were resident in the City area and 2,833 in the rural area. Seven hundred and seventy-one registered electors changed their addresses during the year, 13 died and 1 was convicted of an illegal practice during the previous election.

The registers now contain 65,998 names for the Legislative Council elections (compared with 48,155 in 1951) and 44,896 for the City Council elections (compared with 26,831 in 1951) representing a total electorate of 70,656 persons, of whom 60,685 are men and 9,971 women.

To qualify for the Legislative Council register a man or woman must be a British citizen over 21 years of age; must not have taken any steps to acknowledge 'allegiance, obedience or adherence to any foreign power or State' or held office during the past three years under the government of a foreign power, or hold a foreign passport: and must have resided in the Colony for the past three years.

Qualifications for the City Council franchise are similar, but with certain additional residential or property qualifications.

The local government authority for all parts of the Colony (including the surrounding islands) outside the municipal area is the Rural Board. The Board controls directly such matters as water supply, markets and parks, and has its own building inspectorate; health and engineering work is executed by the departments of the central government. The Report on the Reform of Local Government in Singapore by Dr. L. C. Hill, C.B.E. (published during the year)—insofar as it concerned organization in the rural areas—was considered early in the year by the Rural Board which was unanimously of the opinion that the recommendations in the Report were not immediately suitable for the Colony, and put forward different proposals for improving the administration of the rural areas. Towards the end of the year, an interim strengthening of the Rural Board was approved by the Governor in Council.

The reconstituted Board consists of the Chief Health Officer, Singapore, the Senior Executive Engineer, Rural, P.W.D., the Officer in charge of Food Production, the Secretary for Social Welfare, the Assistant Commissioner of Police, 'Areas', the Director of Education, and twelve other persons nominated by the Governor, under the Chairmanship of a member appointed by the Governor. The Board is now also provided with a Deputy Chairman. On the principle that the way should be prepared for elections to the local government authority in the rural areas the persons nominated by the Governor include one representative from each of the seven District Committees which were set up in 1947 to advise the Chairman of the Rural Board on matters concerning their Districts. The boundaries of the latter are being redrawn and will eventually be established by law.

The implementation of Command Paper No. 197 has continued and the number of locally domiciled officers holding substantive appointments in Division I of the Public Service increased by 34 from 118 in 1951 to 152 this year.

Recruitment to the Higher Schemes of Service, which were introduced in 1950, progresses steadily; the following table shows the number of officers appointed to Parts I and II of these Services and the number of officers undergoing training for promotion to Part II.

			Part II	Part I	No. of officers under training for Part II
Administrative ..	..	..	8	5	1
Chemical ..	..	..	2	*	1
Customs ..	..	..	2	4	—
Engineering ..	..	..	—	—	8
Income Tax ..	..	..	3	14	—
Immigration ..	..	..	2	13	—
Labour ..	..	..	2	6	1
Legal ..	..	..	1	*	3
Meteorological ..	..	..	1	*	3
Printing ..	..	..	2	*	2
Social Welfare ..	..	..	3	4	2
Statistics ..	..	..	2	1	—
Survey ..	..	..	1	*	1
			29	47	22

Appointments and promotions made during the year included:—

- (a) the promotion of ten Chief Inspectors or Inspectors of Police to the gazetted rank of Assistant Superintendent of Police;
- (b) the appointment of seven locally domiciled Medical Officers;
- (c) the promotion of sixteen locally domiciled nurses as Health or Nursing Sisters.

There are now forty-two substantive appointments of local Nursing Sisters out of a total sixty-one substantive appointments. There is however a shortage of experienced nurses suitable for promotion.

Facilities were provided for future appointment of local men to the professional and technical services by the grant of training scholarships, by the introduction of opportunities for post

*There is no Part I of these Services.

selection training and by the appointment of pupils-in-training to such services as Telecommunications and Survey.

A Council for Negotiation for Divisions III and IV of the Public Service based on the Whitley Council procedure in the United Kingdom was set up in June and in addition direct negotiations were conducted with a number of Unions during the year.

The Public Services Commission continued to advise the Governor on matters concerning the public service as provided by Ordinance No. 55 of 1949.

The Chairman, Mr. F. Gordon Smith, Q.C. retired in May and was succeeded by Mr. A. W. Frisby, E.D. Mr. Wee Swee Teow, O.B.E. resigned from membership of the Commission in March and was succeeded by Sir Han Hoe Lim, C.B.E.

The Commission held 97 meetings during the year, interviewed 862 candidates and dealt with a further 135 subjects by circulation of papers.

Besides advising the Governor on appointments and promotions in the public service of the Colony, the Commission submits advice on matters referred to it by the Governor, including references from the Joint Malayan Establishment Board, amendments to Schemes of Service, draft new Schemes of Service, and the suitability of candidates for departmental and other scholarships and for temporary appointments on contracts of one to three years.

Reference was made in the Annual Report for 1951 (page 177) to the reorganization of Government's administrative machinery which is being carried out on the advice and under the guidance of Messrs. Urwick, Orr & Partners, Ltd., a firm of consultants in organization and management. Three members of their staff arrived in the Colony late in 1951, and began investigations on the lines indicated earlier in the 'Withers Report'.

Their work continued throughout this year, and by the end of the year they had submitted seventeen reports containing

their findings and recommendations on various aspects of Government's administration. The majority of the subjects covered were selected with a view to providing simultaneous benefits to as many Departments of Government as possible and were therefore concerned either with the Colonial Secretary's Office or with other points of central organization or control.

The main items in this group were:—

- (i) reorganization of procedures within the Colonial Secretary's Office to allow more rapid and effective despatch of business coming in from the Departments or the public;
- (ii) decentralization of Secretariat responsibilities to reduce the volume of work coming in to that Office;
- (iii) replanning of office accommodation for a large section of Government to improve conditions, relieve congestion and allow for expansion without having recourse to additional major building, earlier proposals for which will, it is hoped, prove to be unnecessary;
- (iv) revision of accounting methods to expedite routines for payments and receipts, facilitate the control of expenditure, speed up the preparation of accounts and eliminate a great deal of laborious clerical work;
- (v) revision of methods for the calculation and payment of salaries throughout Government, to eliminate the present heavy task of preparation in all Departments, to produce a more suitable record of Government establishments and their cost, and to save a great deal of time in the payment of salaries to employees;
- (vi) revision and reissue of the General Orders of the Colony which constitute the main administrative framework within which the business of Government is carried out.

A group of subjects not in the above category concerned the Economic and Commercial functions of Government; the consultants advised on the development of an Economic Section of the Financial Secretariat, the formation of a new Department of Commerce and Industry, and the procedural organization of its component divisions including the previous Departments of Import and Export Control, Foreign Exchange Control, and Supplies.

In addition to this programme the consultants assisted Government in two special investigations:—

- (i) development of mechanized population statistics and methods designed to handle more effectively national registration, food rationing, electoral rolls and manpower schedules;
- (ii) an enquiry concerning the operation of the Malayan Establishment Office in relation to both Singapore and the Federation of Malaya.

Good progress was made during the year in implementation of the consultants' proposals, with resulting economies in time and money and improved facilities both within the Government and for the public.

APPENDIX I

THE EXECUTIVE COUNCIL

Ex officio Members:—

1. His Excellency the Governor—Chairman.
 (a) Sir F. C. Gimson, K.C.M.G. (up to 20th March, 1952).
 (b) Mr. J. F. Nicoll, C.M.G. (from 21st April, 1952).
2. The Honourable the Colonial Secretary (Mr. W. L. Blythe).
3. The Honourable the Attorney-General (Mr. E. J. Davies, Q.C.).
4. The Honourable the Financial Secretary (Mr. W. C. Taylor).
5. The Honourable the President, City Council (Mr. T. P. F. McNeice, O.B.E.).

Nominated Officials:—

6. The Honourable Major-General A. G. O'Carroll Scott, C.B., O.B.E. (General Officer Commanding Singapore District).
7. (a) The Honourable Mr. G. W. Webb (Secretary for Chinese Affairs) up to 7th May, 1952.
 (b) The Honourable Mr. A. Gilmour, C.M.G. (Secretary for Economic Affairs) from 8th May, 1952.

Unofficials:—

8. The Honourable Mr. E. M. F. Fergusson (Nominated).
9. The Honourable Mr. Tan Chin Tuan, C.B.E. (Nominated).
10. The Honourable Mr. M. J. Namazie (Nominated).
11. The Honourable Mr. C. C. Tan (Elected by the Legislative Council).
12. The Honourable Mr. Thio Chan Bee (Elected by the Legislative Council).
13. The Honourable Mr. R. Jumabhoy (Nominated).

Note:—(a) The Colonial Secretary (Mr. W. L. Blythe) was Chairman of the Council for the following periods:—

- (i) 24th January, 1952 to 6th February, 1952.
- (ii) 20th March, 1952 to 20th April, 1952.

During these periods Mr. A. Gilmour, C.M.G. (Secretary for Economic Affairs) acted as Colonial Secretary.

(b) From 20th June, 1952 to 2nd July, 1952, Mr. R. W. Jakeman, the Under Secretary, acted as Colonial Secretary during the absence on casual leave of the Colonial Secretary.

(c) Mr. T. M. Hart acted as Financial Secretary from 3rd April, 1952 to 17th September, 1952, during the absence on furlough of the Financial Secretary (Mr. W. C. Taylor).

APPENDIX II

THE LEGISLATIVE COUNCIL

Members as on 1st January, 1952

H. E. the Governor Sir Franklin Gimson, K.C.M.G. (President).

The Honourable the Colonial Secretary, Mr. W. L. Blythe (*ex officio*).

The Honourable the Attorney-General, Mr. E. J. Davies, Q.C. (*ex officio*).

The Honourable the Acting Financial Secretary, Mr. W. C. Taylor (*ex officio*).

The Honourable the President, City Council Mr. T. P. F. McNeice, O.B.E. (*ex officio*).

The Honourable Dr. W. J. Vickers, C.M.G., Director of Medical Services (Nominated Official Member).

The Honourable Mr. A. W. Frisby, E.D., Director of Education (Nominated Official Member).

The Honourable Mr. J. A. Harvey, Commissioner of Lands (Nominated Official Member).

The Honourable Mr. C. H. Butterfield, Solicitor-General (Nominated Official Member).

The Honourable Mr. G. W. Davis, Commissioner for Labour (Nominated Official Member).

The Honourable Mr. Tan Chin Tuan, C.B.E., Deputy President and Elected Member for the Chinese Chamber of Commerce.

The Honourable Mr. R. Jumabhoy, J.P., Elected Member for the Indian Chamber of Commerce.

The Honourable Mr. John Laycock, M.C., Elected Member for Katong.

The Honourable Mr. C. C. Tan, Elected Member for Tanglin.

The Honourable Mr. N. A. Mallal, Elected Member for City.

The Honourable Mr. Thio Chan Bee, J.P., Elected Member for Balestier.

The Honourable Mr. P. F. de Souza, Nominated Unofficial Member.

The Honourable Mr. Lim Yew Hock, Elected Member for Keppel.

The Honourable Mr. A. McLellan, J.P., Nominated Unofficial Member.

The Honourable Mr. E. M. F. Fergusson, J.P., Elected Member for the Singapore Chamber of Commerce.

The Honourable Mr. C. R. Dasaratha Raj, Elected Member for Rochore.

The Honourable Mrs. Vilasini Menon, Elected Member for Seletar.

The Honourable Dr. C. J. P. Paglar, Elected Member for Changi.

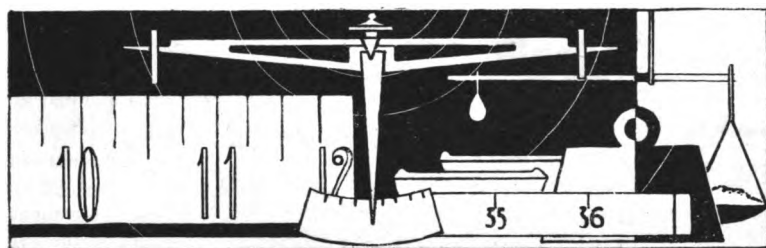
The Honourable Mr. H. J. C. Kulasingha, Elected Member for Bukit Timah.

The Honourable Inche Ahmad bin Mohamed Ibrahim, Nominated Unofficial Member.

The Honourable Mrs. Elizabeth Choy, O.B.E., Nominated Unofficial Member.

The following changes occurred during the year:—

- (1) Mr. G. W. Davis, Commissioner for Labour (Nominated Official Member) resigned on 14th January, 1952, and Mr. A. Gilmour, c.m.g., then Secretary for Economic Affairs, was appointed as a Nominated Official Member on 30th January, 1952, in his place.
- (2) His Excellency Sir Franklin Gimson, K.C.M.G., Governor and Commander-in-Chief (*ex officio* President of the Council) retired from the Colony on 20th March, 1952, and His Excellency Mr. J. F. Nicoll, c.m.g., assumed office as President on the 23rd April, 1952.
- (3) Mr. W. C. Taylor, Financial Secretary (*ex officio* Member), proceeded on leave on 3rd April, 1952, and returned to the Colony on 16th September, 1952. During this period Mr. T. M. Hart acted in place of Mr. W. C. Taylor.
- (4) Mr. C. H. Butterfield, Q.C., Solicitor-General (Nominated Official Member) proceeded on leave on 3rd April, 1952, and returned to the Colony on 14th October, 1952. During this period Mr. M. Buttrose was appointed as Temporary Member.
- (5) Mr. A. W. Frisby, E.D., Director of Education (Nominated Official Member) resigned on 12th May, 1952, and Mr. G. W. Davis, Commissioner for Labour, was appointed as a Nominated Official Member on 19th May, 1952, in his place.
- (6) Mrs. Vilasini Menon (Elected Member for Seletar) resigned on 22nd September, 1952.
Mr. M. P. D. Nair was declared elected on 19th November, 1952, as Member for Seletar.



XIX

Weights and Measures

THE STANDARD measures recognized by the laws of the Colony are as follows:—

- standard of length, the imperial yard;
- standard of weight, the imperial pound;
- standard of capacity, the imperial gallon.

Among the Asiatic commercial and trading classes Chinese steel-yards (called *daching*) of various sizes are generally employed for weighing purposes.

The following are the principal local measures used with their English equivalents:—

the <i>chupak</i> ..	.. equals	1 quart;
the <i>gantang</i> ..	.. „	1 gallon;
the <i>tahil</i> ..	.. „	1½ oz.;
the <i>kati</i> (16 <i>tahils</i>)	.. „	1½ lb.;
the <i>pikul</i> (100 <i>katis</i>)	.. „	133½ lb.;
the <i>koyan</i> (40 <i>pikuls</i>)	.. „	5,333½ lb.



XX

Selected Reading List

MOST AUTHORS have approached Malaya as a single unit, and there are few subjects in which works have been prepared dealing with Singapore alone. Accordingly, though the present bibliography is concerned primarily with the Colony and its dependancies (Christmas and the Cocos-Keeling Islands), in many cases it has been necessary to include more general publications.

A number of the earlier books listed especially in the section 'The Contemporary Scene', are out of print and scarce, but in most instances they can be consulted at the Raffles Library. No satisfactory detailed bibliography of Singapore has yet been compiled, but additional titles published before 1940 may be found in the catalogue of the Malaysian Section of this Library published in *JMBRAS*,* 19 (3), 1941, copies of which can still be obtained from the Society.

ADMINISTRATION AND PUBLIC SERVICES

Administration

Emerson, Rupert. *Malaysia: A Study in Direct and Indirect Rule*. (NEW YORK, MACMILLAN, 1937). A comparative study of administration in British and Dutch territories in South-East Asia by an American author.

**JMBRAS*=*Journal of the Malayan Branch of the Royal Asiatic Society*, q.v. Vols. 1-19, 1923-41: Vol. 20, 1947, continuing. Edited from the Raffles Museum, Singapore.

- Hill, L. C. *Local Government in Singapore*. (SINGAPORE, GOVERNMENT PRINTER, 1952). A report on suggested reforms of local government.
- Middlebrook, S. M. and Pinnick, A. W. *How Malaya is Governed*. (LONDON, LONGMANS GREEN, 1940). A short description of local administration in Malaya intended for use in secondary schools.
- Mills, Lennox. *British Rule in Eastern Asia*. (LONDON, O.U.P., 1942). A study of contemporary government and economic development in British Malaya and Hong Kong.
- Mills, Lennox, and associates. *The New World of South-East Asia*. (LONDON, O.U.P., 1949).
- Taylor, W. C. *Local Government in Malaya*. (ALOR STAR (KEDAH), GOVERNMENT PRESS, 1949). An account of the work of municipalities, town boards and rural boards in Malaya: a readable monograph on an intricate subject.
- Wilson, Sir Samuel. *Report on a Visit to Malaya*. (LONDON, H.M.S.O., 1933). A report on proposals leading to decentralization of public services in the Federated Malay States.

Economic Organization

- Allen, D. F. *Report on the Major Ports of Malaya*. (KUALA LUMPUR, GOVERNMENT PRINTER, 1951). A descriptive and historical account of the ports of Singapore, Penang, Port Swettenham and Malacca. All aspects of administration are covered, and suggestions made regarding future development.
- Benham, Dr. Frederic. *The National Income of Malaya, 1947-49 (with a note on 1950)*. (SINGAPORE, GOVERNMENT PRINTER, 1951). The first complete assessment of Malayan economy. The national income estimates make use of information given in departmental reports, trade statistics and similar official sources.
- Central Office of Information, London. *An Economic Review of Malaya, 1945-49*. (LONDON, CENTRAL OFFICE OF INFORMATION, 1950). An account of post-war reconstruction and economic progress in Malaya, and of current economic problems.
- E.C.A.F.E. Secretariat. *Economic Survey of Asia and the Far East in 1950*. (LONDON, H.M.S.O. FOR UNITED NATIONS, 1951).
- Lim Tay Boh. *The Co-operative Movement in Malaya*. (LONDON, C.U.P., 1950). Discusses the requirements of a successful co-operative movement in Malaya and gives the case for State assistance for the movement.
- MacKenzie, K. E. *Malaya: Economic and Commercial Conditions in the Federation of Malaya and Singapore*. (LONDON, H.M.S.O., 1952).

Social Services

- Barnes, L. J. *Report of the Committee on Malay Education*. (LONDON, CROWN AGENTS FOR THE COLONIES, 1951).

Carr-Saunders, Sir Alexander. *Report on University Education in Malaya*. (KUALA LUMPUR, GOVERNMENT PRINTER, 1948). The report, by the chairman, of an education commission which visited Malaya in 1947, and recommended the replacement of Raffles College and the King Edward VII College of Medicine by the present University of Malaya.

Chelliah, D. D. *A Short History of the Educational Policy of the Straits Settlements, 1800-1925 (circa)*. (KUALA LUMPUR, GOVERNMENT PRINTER, 1948). Starting with the ideas Sir Stamford Raffles had in mind when he founded the Singapore Institution, this history traces educational policy in Singapore, Malacca and Penang up to 1925, and in some sections beyond this date, but not later than 1939.

Education Department, Singapore. *Educational Policy in Singapore: Ten Years' Programme*. (SINGAPORE, GOVERNMENT PRINTER, 1947). Contains the data immediately necessary for the detailed planning of educational progress in Singapore.

Fenn, W. P. and Wu, Dr. Teh-Yao. *Report on Chinese Schools and the Education of Chinese Malaysians*. (KUALA LUMPUR, GOVERNMENT PRINTER, 1951).

Ho, Dr. Seng-Ong. *Education for Unity in Malaya*. (PENANG, MALAYAN TEACHERS' UNION, 1952). An evaluation of the educational system of Malaya, with a strong plea for a single type of non-racial school written by the educational secretary, Methodist Schools, Malaya: Dr. Ho is also principal of the Anglo-Chinese School, Penang.

Singapore Housing Committee. *Report of the Singapore Housing Committee*. (SINGAPORE, GOVERNMENT PRINTER, 1947). An illustrated commentary on housing in Singapore in 1947, with recommendations for the formation of satellite towns and other means to improve housing conditions.

Social Welfare Department, Singapore. *A Social Survey of Singapore, 1947*. (SINGAPORE, GOVERNMENT PRINTER, 1947). A preliminary study of some aspects of social conditions in the municipal area of Singapore. See also Firth, Professor Raymond, *Report on Social Science Research in Malaya*. (SINGAPORE, GOVERNMENT PRINTER, 1948). This latter report embodies the results of the author's examination of social conditions in Malaya, and the need for and prospects of social science research there. It recommends, *inter alia*, a study of the economically depressed coastal Malays of Singapore Island and the island life of the Malays at Pulau Tekong, Pulau Ubin and Pulau Sudong.

Labour

Awbery, S. S. and Dalley, F. W. *Labour and Trade Union Organization in the Federation of Malaya and Singapore*. (KUALA LUMPUR, GOVERNMENT PRINTER, 1948). The report of an enquiry made early in 1948 into the situation of labour and the trade unions in Malaya.

Blythe, W. L. *Report on Chinese Labour in Malaya*. (KUALA LUMPUR, GOVERNMENT PRINTER, 1938). (Printed but not published).

Blythe, W. L. *Historical Sketch of Chinese Labour in Malaya*. (JMBRAS, 20, (1), 1947: 64-114). A short but comprehensive historical survey of Chinese labour in Malaya from the beginning of the nineteenth century to 1940, completed in 1941.

Colonial Office. *Labour Administration in the Colonial Territories, 1944-50*. (LONDON, H.M.S.O., 1951).

Law and Order

Onraet, Rene. *Singapore—A Police Background*. (LONDON, DOROTHY CRISP, N.D.). An account of the work and problems of the police force in Singapore by a former Inspector-General of Police, including chapters on secret societies, the Japanese espionage in pre-war years and the early activities of the Chinese communists.

Singapore Prison Enquiry Commission. *Report of the Singapore Prison Enquiry Commission*. (SINGAPORE, GOVERNMENT PRINTER, 1948.) A very full and detailed report with recommendations on the system of prison administration and related matters in Singapore.

THE PHYSICAL BACKGROUND

Geography and Geology

Alexander, Dr. F. E. S. *Report on the Availability of Granite in Singapore and the Surrounding Islands*. (SINGAPORE, GOVERNMENT PRINTER, 1950).

Dobby, E. H. G. *South-East Asia*. (LONDON, U.L.P. 1950). This work is primarily a text-book of the geography of Burma, Siam, Malaya and Indo-China, and of the islands to the South and East of these as far as the Philippines: it is divided into three sections which cover the natural setting, the political units and the social geography of the region.

Hodgson, Capt. F. M. *The Malacca Strait Pilot*, 3rd Edition. (LONDON, ADMIRALTY, 1946). Covers the Malacca Strait and its approaches, Singapore Island and adjacent coasts, and the West coast of Sumatra.

Scrivenor, J. B. *The Geology of Malaya*. (LONDON, MACMILLAN, 1931). A well-illustrated account of Malayan geology, both economic and academic. The author was the senior Government Geologist from 1903-31.

Flora

Corner, E. J. H. *Wayside Trees of Malaya*. (SINGAPORE, GOVERNMENT PRINTER, 1940, REPRINTED 1952). In two volumes, one of text well illustrated with line drawings, and the second of photographic plates, this work provides for the identification of nearly a thousand species of Malayan trees, and presents a wealth of readable matter concerning them.

Henderson, M. R. *Malayan Wild Flowers*. (KUALA LUMPUR, PUBLISHED BY THE MALAYAN NATURE SOCIETY). In three double numbers of its journal, September 1949, September 1950 and June 1951; reissued (by KELLY & WALSH, SINGAPORE), in one volume 1951. This work aims at enabling

the non-expert to identify the majority of the smaller dicotyledonous plants found in all habitats in Malaya, forest country, by the roadside, on the seashore and in waste spaces. It is well provided with keys, and richly illustrated with line drawings. A second section on the monocotyledons is in preparation.

Holtum, Professor R. E. *Malayan Garden Plants*. (SINGAPORE, GOVERNMENT PRINTER). A series of small booklets issued by the Botanic Gardens, Singapore, each containing line drawings and descriptions of ten plants of horticultural interest: four have now been published (1950-52).

Holtum, Professor R. E. *The Malayan Orchids*. This, the first volume in a new *Flora Malayana*, is due to be published in 1953. It will cover all the local hybrids known to date, in addition to the large number of wild forms.

Ridley, R. N. *The Flora of the Malay Peninsula*. (LONDON, L. REEVE, 5 VOLS., 1922-25). This contains brief botanical descriptions of all the species of higher plants (about 6,000) known to occur in the Malay Peninsula (South of latitude 7° North) up to 1925. It is now considerably out of date and in need of revision, but its place will ultimately be taken by the *Flora Malayana*.

Fauna

Boulenger, G. A. *Reptilia and Batrachia of the Malay Peninsula*. (LONDON, TAYLOR & FRANCIS, 1912). This was the first volume in a proposed series intended to cover the vertebrate fauna of the peninsula South of the Isthmus of Kra, on lines similar to the Fauna of British India series. H. C. Robinson began work on the mammal volume, but died in 1928 before he had completed the draft of the primates, and the work was then abandoned. The present volume is now much out of date: a partial revision, itself now out of date, is provided by a monograph by Malcolm A. Smith, *The Reptilia and Amphibia of the Malay Peninsula*, published in the *Bulletin of the Raffles Museum* (No. 3, 1930).

Foenander, E. C. *Big Game of Malaya*. (LONDON, BATCHWORTH, 1952). This work is confined to the Seladang (Malayan Gaur), Elephant, Tapir and Rhinoceros, none of which are known to have occurred on Singapore Island in a feral condition.

Gibson-Hill, C. A. *An Annotated Checklist of the Birds of Malaya*. (SINGAPORE, BULLETIN OF THE RAFFLES MUSEUM No. 20 (1949)). An annotated list of the 575 species known to have occurred in Malaya, with a summary of their status and local distribution. No provision is made for identification. A subsequent paper by the same author (*Bull. Raff. Mus.*, 21, 1950: 132-83) gives a comparable list for Singapore Island only, with briefer annotations.

Gibson-Hill, C. A. *An Annotated Checklist of the Mammals of Malaya*. A comparable work to the above, but this time with the Singapore Island list included as an appendix and with a fuller bibliography, in preparation, is due to appear as *Bulletin of the Raffles Museum*, No. 25, in the course of 1953.

- Glenister, A. G. *The Birds of the Malay Peninsula, Singapore and Penang.* (LONDON, O.U.P., 1951.) This work gives brief descriptions, with field notes, of all the birds on the Annotated Checklist, on which it draws for status and distribution. It is illustrated with plates showing 78 birds in colour or monochrome, and a further 74 text drawings and photographs.
- Tate, G. H. H. *Mammals of Eastern Asia.* (NEW YORK, MACMILLAN, 1947; LONDON, MACMILLAN, 1949). This is a useful work of 366 pp., with a number of excellent line drawings in the text, but it covers too wide an area to be really effective. Additional information on the majority of the Malayan species can be found in two works by E. Banks on the mammals of Borneo (*JMBRAS*, 9, (2), 1931, 139 pp.: and *Bornean Mammals*, (KUCHING PRESS, SARAWAK, 1949, 83 pp.), and in papers by C. A. Gibson-Hill and J. L. Harrison in the *Malayan Nature Journal*.

AGRICULTURE, FISHERIES AND ECONOMIC PRODUCTS

Agriculture and Economic Products

- Burkill, I. H. *A Dictionary of the Economic Products of the Malay Peninsula.* (LONDON, CROWN AGENTS FOR THE COLONIES, 1935. 2 VOLS.). A comprehensive account of the subject by an author who is himself a botanist. The greater part of the work is devoted to vegetable products, but mineral and animal resources receive adequate treatment.
- Collier, F. S. *Report of the Forestry Adviser to the Secretary of States for the Colonies on a Visit to the Federation and Singapore in 1951.* Printed in the *Malayan Forester*, 15, (1), January 1952. (CAXTON PRESS, KUALA LUMPUR).
- Dobby, E. H. G. *Agricultural Questions of Malaya.* (LONDON, C.U.P., 1949).
- Grist, D. H. (Comp.). *An Outline of Malayan Agriculture.* (KUALA LUMPUR, DEPARTMENT OF AGRICULTURE, 1936). A comprehensive description of Malayan agriculture, with parts devoted to conditions, practice, major, secondary and minor crops and animal husbandry, including fresh water fish cultivation, compiled by an agricultural economist.
- Kennaway, M. J. *Cavalcade of Rubber.* (SINGAPORE, KELLY & WALSH, 1936). A brief sketch of the history of the rubber industry in Malaya from its experimental introduction in 1876 to the early days of post-depression recovery.
- Knorr, K. E. *World Rubber and its Regulation.* (LONDON, O.U.P., 1945). A survey by a member of the staff of Stanford University, California, which traces the growth of the natural rubber industry, discusses its condition between the two world wars, and outlines the rise of the synthetic rubber industry.
- Wickizer, V. D. and Bennett, M. K. *Rice Economy of Monsoon Asia.* (CALIFORNIA, STANFORD UNIVERSITY PRESS, N.D.). A comprehensive monograph of the subject, covering tropical continental Asia from India to Manchuria, Malaya, Indonesia, the Philippines and Japan.

FISHERIES

- Burdon, T. W. *Report on the Department of Fisheries, Singapore*. An extract from the Report of the Fisheries Department, Malaya, for 1949. (KUALA LUMPUR, GOVERNMENT PRINTER, 1950). Gives an excellent, comprehensive summary of the information then available about the Singapore fisheries, both marine and fresh water.
- Firth, Professor Raymond. *Malay Fishermen—Their Peasant Economy*. (LONDON, KEGAN PAUL, 1946). A detailed account of fishing economics and methods based on a study of the Malays on two sections of the coasts of Kelantan and Trengganu: the work is of considerable interest, but much more limited in scope than its title suggests. A survey of fisheries in Malaya and Indonesia, based on published sources, is given in the first chapter.
- Kesteven, G. L. (Ed.). *Malayan Fisheries*. (SINGAPORE, H. M. GOVERNMENT, 1949). A well-illustrated handbook prepared for the inaugural meeting of the Indo-Pacific Fisheries Council, held in Singapore (March 1949). An up-to-date summary of the subject, including sections on the marine faunas, fishing methods and economics, and types of boats used.
- Maxwell, C. N. *Malayan Fishes*. (SINGAPORE, JSBRAS, No. 84, 1921). A well-illustrated and useful account of fish and fisheries in Malaya, written from the point of view of a Malay scholar rather than an ichthyologist.
- Tham Ah Kow. *The Fishes of the Singapore Straits*. (LONDON, H.M.S.O., 1951). A short, authoritative summary, the first of a series of Colonial Fisheries Monographs.

POPULATION

Analysis by Numbers

- Del Tufo, M. V. *A Report on the 1947 Census of Population*. (LONDON, CROWN AGENTS FOR THE COLONIES, 1949).
- Smith, T. E. *Population Growth in Malaya*. (LONDON, CHATHAM HOUSE, 1951). A description of the main trends of population growth in Singapore and the Federation of Malaya over the past few decades.
- Vlieland, C. A. *A Report on the 1931 Census of Population*. (LONDON, CROWN AGENTS FOR THE COLONIES, 1931). Replaced, in terms of figures by the later census, but its introduction contains much material still of interest.

The Chinese

- Blythe, W. L. *The Interplay of Chinese Secret and Political Societies in Malaya*. Two articles published in *Eastern World*, March and April 1950.
- Purcell, Dr. V. *The Chinese in Malaya*. (LONDON, O.U.P., 1948). A concise but authoritative account of the Chinese in Malaya from the earliest contacts down to the post-war period.

- Purcell, Dr. V. *The Chinese in South-East Asia*. (LONDON, O.U.P., 1950). The first full and authoritative account of the Chinese in South-East Asia to be published.
- Song Ong Siang. *One Hundred Years' History of the Chinese in Singapore*. (LONDON, MURRAY, 1932). A chronological record of the contribution of the Chinese community to the development, progress and prosperity of Singapore from 1819 to 1919.
- Vaughan, J. D. *Manners and Customs of the Chinese of the Straits Settlements*. (SINGAPORE, MISSION PRESS, 1879). A valuable account of Chinese local customs at this period, which unfortunately has not been repeated at a later date.
- Ward, J. S. M. and Stirling, W. G. *The Hung Society*. (LONDON, BASKERVILLE PRESS, 1925). 3 vols.

The Malays

- Brown, C. C. *Malay Sayings*. (LONDON, ROUTLEDGE & KEGAN PAUL, 1951).
- Brown, C. C. *The Sejarah Melayu or 'Malay Annals', a translation of Raffles MS 18, with a Commentary*. (SINGAPORE, JMBRAS, 25, (2 and 3), 1953). The first English translation of a complete text of the most important and interesting of the Malay literary classics, and the only English version in print.
- Coope, A. E. *A Guide to Malay Conversation*. (SINGAPORE, KELLY & WALSH, 1950).
- Hamilton, A. W. *Easy Malay Vocabulary*. (SINGAPORE, KELLY & WALSH, 1936). A very useful vocabulary of colloquial Malay based on the learning of 500 elementary and 500 more advanced words, with phrases associated with them.
- Hill, A. H. and Gibson-Hill, C. A. *Malay Arts and Crafts*. (SINGAPORE, ART SOCIETY, 1951). A short but fully illustrated summary of the extant Malay arts and crafts.
- Wheeler, L. R. *The Modern Malay*. (LONDON, ALLEN & UNWIN, 1928). A history of the Peninsular Malays, their conditions of life at the time of writing and a discussion of their future.
- Wilkinson, R. J. *A Malay-English Dictionary (Romanised)*. (MYTILENE (GREECE), SALAVOPOULOS & KINDERLIS, 1932). 2 vols. In some respects this work is now out-of-date, but it remains the finest Malay-English dictionary, and it lives, still of considerable value and a classic in its own right.
- Winstedt, Sir Richard. *A History of Malay Literature*. (SINGAPORE, JMBRAS, 17, (3), 1939). An excellent summary of the subject, with a chapter on modern developments by Zainal-'Abidin bin 'Ahmad. See also two papers by the latter author on recent Malay literature and Malay journalism (JMBRAS, 19, 1941 (1): 1-20; and (2): 244-250).

- Winstedt, Sir Richard. *The Malays—A Cultural History*. (SINGAPORE, KELLY & WALSH, 1947; LONDON, ROUTLEDGE & KEGAN PAUL, 1950). A good account of the origins, history, beliefs, traditions and customs of the Peninsular Malays, and the only general summary available in the English language.
- Winstedt, Sir Richard. *The Malay Magician*. (LONDON, ROUTLEDGE & KEGAN PAUL, 1951). A revised and expanded version of the author's earlier *Shaman, Saiva and Sufi*.
- Winstedt, Sir Richard. *A Practical Modern English-Malay Dictionary*. (SINGAPORE, KELLY & WALSH, 1952). A useful and compact adaptation of the author's dictionary of 1922.

HISTORY

The Nineteenth Century

The following works are restricted to the period after the establishment of the British settlement on the island in 1819. The best recent notices of the earlier history of the island are contained in papers in the *JMBRAS*, notably those by Dr. W. Linehan (20, (2), 1947: 117-27) on the kings of fourteenth century Singapore, and by Sir Roland Braddell (23, (1), 1950: 37-51), Lung-Ya-Men and Tan-Ma-Hsi. The only general history of Malaya is still the monograph by Sir Richard Winstedt published in the same journal (13, (1), 1935: 1-270), though it does not come beyond the third quarter of the last century.

- Braddell, T. *Statistics of the British Possessions in the Straits of Malacca*. (PENANG, PINANG GAZETTE, 1861). Reference should also be made to the notices of Singapore published by the same author in the *Journal of the Indian Archipelago and Eastern Asia* (1853-55). Together these give transcriptions of a number of interesting documents relating to the early history of Singapore, the originals of which are no longer extant.
- Buckley, C. B. *An Anecdotal History of Old Times in Singapore*. (SINGAPORE, FRASER & NEAVE, 1902, 2 vols.). This work covers the period 1819-67, and consists largely of transcriptions of contemporary newspaper items. Unfortunately the compiler's approach was largely uncritical, and little attempt was made to check or follow up points of interest. As a result, though the work in of considerable value as a starting point, it has to be used with the greatest caution.
- Cowan, C. D. (Ed.). *Early Penang and the Rise of Singapore, 1805-32*. (SINGAPORE, JMBRAS, 23, (2), 1950). A selection of documents from the manuscript records of the Hon'ble East India Company, chosen to illustrate the early commercial progress of the two settlements, with an introductory chapter by the editor.
- Luscombe, F. M. *Singapore 1819-1930*. (SINGAPORE, C. A. RIBEIRO, 1930). A brief history of the Colony with a useful chronology in appendix.
- Makepeace, W., Brooke, G. E., and Braddell, R. St. J. (General editors). *One Hundred Years of Singapore*. (LONDON, JOHN MURRAY, 1921). 2 vols.

An account of the social and economic progress of Singapore from its foundation in 1819 to 1919. The contributors include well-known old residents of the city. Unfortunately the articles are not all of equal quality, and a few of the writers, notably Makepeace, exhibit a distressing lack of interest in the accuracy of the dates that they quote.

Mills, L. A. *British Malaya 1824-67*. (SINGAPORE, JMBRAS, 3, (2), 1925). A survey of the early history of British colonisation in Malaya: events previous to the Anglo-Dutch Treaty of 1824 are summarized in the first three chapters. This is a very useful work, but its readability is marred by the number of printers' errors.

Swettenham, Sir Frank. *British Malaya*. (LONDON, ALLEN & UNWIN, 1948). An account of the origin and progress of British influence in Malaya. Swettenham joined the Straits Settlements Civil Service in 1870, arriving in Singapore in 1871: from 1901 to 1903 he was Governor and High Commissioner.

Winsley, T. M. *A History of the Singapore Volunteer Corps. 1854-1937*. (SINGAPORE, GOVERNMENT PRINTER, 1938).

Wright, A., and Cartwright, H. A. (Editors). *Twentieth Century Impressions of British Malaya: its History, People, Commerce, Industries and Resources*. (LONDON, LLOYD'S PUBLISHING CO., 1908). An exhaustive survey of the contemporary scene, and a good summary of the past in the light of the knowledge then available.

Recent Events

Grenfell, Capt. Russell, R.N. *Main Fleet to Singapore*. (LONDON, FABER, 1951). Includes an account of H. M. Navy's part in the Japanese war in Malayan waters.

Low, N. I. and Cheng, H. M. *This Singapore, Our City of Dreadful Nights*. (SINGAPORE, CITY BOOK STORE, N.D.). A Chinese record of the Japanese occupation of Singapore.

Morrison, Ian. *Malayan Postscript*. (LONDON, FABER & FABER, 1942). The best of the professional descriptions of the loss of Malaya.

Percival, A. E. *The War in Malaya* (LONDON, EYRE & SPOTTISWOODE, 1949). The Malayan campaign as seen by the G.O.C. Malaya, in retrospect.

Tomlinson, H. M. *Malay Waters*. (LONDON, HODDER & STOUGHTON, 1950). A record of the part played in the war by the vessels of the Straits Steamship Company.

Sir Stamford Raffles

Boulger, Demetrius C. *The Life of Sir Stamford Raffles*. (LONDON, HORACE MARSHALL, 1897). The most complete account of Raffles's political career yet published, based on records in the India Office.

Coupland, R. *Raffles of Singapore*. (LONDON, COLLINS, 1946). A short biography, but the best for a balanced presentation of the main outline of his life.

- Egerton, Hugh E. *Sir Stamford Raffles*. (LONDON, ALLEN & UNWIN, 1900).
- Hahn, Emily. *Raffles of Singapore*. (LONDON, ALDON PRESS, 1948). A novelist's work, with the inevitable defects, but probably the account most likely to be read at the present time.
- Raffles, Lady Sophia. *Memoir of the Life and Public Services of Sir Thomas Stamford Raffles*. (LONDON, JOHN MURRAY, 1830). Useful because of its extracts from Raffles's papers and letters.
- Raffles, Sir Stamford. *Statement of the Services of Sir T. Stamford Raffles, etc.* (LONDON, COX & BAYLIS, 1824). Includes Raffles's own summary of the considerations that lead to his establishment of the settlement on Singapore Island.

THE CONTEMPORARY SCENE

The works in this section are cited as devoted to, or containing appreciable passages, describing Singapore as the authors have known it at different periods. The list is by no means exhaustive, and an attempt has been made to pick out only the more valuable contributions to the subject.

1819-67

- 'Abdu'llah bin 'Abdu'l Kadir. *The Autobiography of Munshi Abdullah*. Abdullah, who was Malay teacher to Raffles, reached Singapore about five months after the establishment of the settlement, and thereafter spent the greater part of his time there for more than twenty years. His autobiography, containing much remembered from the early days, was written, in Malay, towards the end of his life. There are several English translations of parts of his text, notably the accounts published by J. T. Thomson (London, 1874), and Dr. W. G. Shellabear (Singapore, 1918). The JMBRAS at present holds the MS of an annotated translation of the complete text; prepared by A. H. Hill, which it will publish sometime in 1954.
- Begbie, Capt. P. J. *The Malayan Peninsula*. (MADRAS (INDIA), VEPERY MISSION PRESS, 1834). This includes one of the earlier compilations on the founding of Singapore, and a description of the town in 1832, when Begbie, who was stationed at Malacca, visited it.
- Bennett, G. *Wanderings in New South Wales, Batavia, Pedir Coast, Singapore and China, 1832-34*. (LONDON, RICHARD BENTLEY, 1834). 2 vols. An account of his visit to Singapore, November-December 1833, occurs in vol. 2 (pp. 127-227): his primary interest was in botanical matters, but he includes other information of some value.
- Cameron, J. *Our Tropical Possessions in Malayan India*. (LONDON, SMITH, ELDER & CO., 1865). A most valuable account of Singapore in the early sixties, with shorter notes on Penang, Province Wellesley and Malacca.
- Cavenagh, Gen. Sir Orfeur. *Reminiscences of an Indian Official*. (LONDON, W. H. ALLEN & CO., 1884). The autobiography of the last Indian governor of the Straits Settlements, 1859-67 (See pp. 250-372): a useful supplement to Cameron's account.

- Crawfurd, J. *Journal of an Embassy to the Courts of Siam and Indo-China*. (LONDON, RICHARD BENTLEY, 1828). Dr. Crawfurd was Resident from 1823-27, in succession to Col. Farquhar: he includes a short account of Singapore in January-February 1822 (when he passed through on his way to Siam), and again of the period of his administration. Dr. Crawfurd put through the revised treaty, whereby the whole island passed into British hands, and was also responsible for the first official census (at the end of 1823).
- Davidson, G. F. *Trade and Travel in the Far East*. (LONDON, MADDEN & MALCOLM, 1846). Includes a short but useful account of Singapore in the early eighteen-forties.
- Duncan, W. S. *Singapore Sixty Years Ago*. (SINGAPORE, STRAITS TIMES PRESS, 1883). A personal journal of the life of a young merchant in Singapore, February to June 1824, printed without annotation from a private diary. The author was something of a prig, but the work is of considerable value on the field it covers.
- Earl, G. W. *The Eastern Seas, 1832-34*. (LONDON, WM. ALLEN & CO., 1837). Includes a good description of Singapore, about 1833, which Earl visited on several occasions in the period covered by his book (See pp. 343-419): Earl later served as a magistrate in Singapore and Penang.
- Low, Major James. *Extracts from an Unpublished Journal of a Residence at Singapore, during part of 1840 and '41*. Published as a serial weekly in the *Singapore Free Press* from 4th November, 1841 to 6th January, 1842, and apparently never reprinted. A most valuable and little-known account of Singapore at this time: an annotated reprinting is being prepared for the JMBRAS.
- Newbold, Lt. T. J. *Political and Statistical Account of the British Settlements in the Straits of Malacca*. (LONDON, JOHN MURRAY, 1839). In general a work of considerable value and authority, though the material directly relating to Singapore is slight.
- Norris, G. *Singapore Thirty Years Ago*. (SINGAPORE, STRAITS TIMES PRESS, 1878). Reminiscences of Singapore 1845-55: short, sketchy, but seemingly on the whole reasonably accurate and of much interest.
- Osborn, Capt. Sherard, R.N. *My Journal in Malayan Waters*. (LONDON, ROUTLEDGE, WARNE & ROUTLEDGE, 1860). Includes interesting notes on Singapore in the middle forties.
- Thomson, J. T. *Some Glimpses into Life in the Far East*. (LONDON, RICHARDSON & CO., 1865). Thomson was Government Surveyor, Singapore, from 1841 to February 1855, as an uncovenanted officer. The book consists of a series of sketches, vividly written and seemingly in the main accurate, describing people and social life in the forties. See also notes on Thomson in JMBRAS, 26, (1), 1953.

- Train, G. F. *The Merchant Abroad*. (LONDON, SAMPSON LOW, SON & CO., 1857). A series of letters by an itinerant gentleman from Boston, U.S.A., who visited Singapore, December 1855 (See pp. 66-86).
- Wilkes, Charles, U.S.N. *Narrative of the United States Exploring Expedition, 1838-42*. (PHILADELPHIA (U.S.A.), LEA & BLANCHARD, 1845, 5 vols.). Visited Singapore, February 1842 (See vol. 5, pp. 371-410): an interesting account, though seemingly not wholly accurate in detail, in spite of help from Balestier, the American Consul.

The Middle Period

- Eastwick, Mrs. E. *The Resident-Councillor* (1898). *The Governor's Wife* (1900). (SINGAPORE, STRAITS TIMES PRESS, 1898 and 1900).
- Hornaday, W. T. *Two Years in the Jungle*. (LONDON, KEGAN PAUL & TRENCH, 1885). Includes a visit to Singapore in the early eighties: the author was an American field-naturalist who apparently preferred the jungle.
- Keughran, T. J. *Picturesque and Basey Singapore*. (SINGAPORE, LAT PAU PRESS, 1887). An early guide-book, and a good period piece.
- McNair, Major Fred and Bayliss, W. D. *Prisoners their own Warders*. (LONDON, CONSTABLE, 1899). McNair was director of public works and in charge of the convict labour in Singapore from 1857-75. The book includes useful information on the building of St. Andrew's Church (the present Cathedral) and Government House, but he waited too long to write it, and it is unreliable on matters outside McNair's personal experience.
- Reith, Rev. G. M. *Handbook to Singapore*. (SINGAPORE, SINGAPORE AND STRAITS PRINTING OFFICE, 1892).
- Ross, J. D. *The Capital of a Little Empire*. (SINGAPORE, KELLY & WALSH, 1898). A reprint of a series of articles (*Singapore Free Press*) by one long resident here.
- Thomson, J. *The Straits of Malacca, Indo-China and China*. (LONDON, SAMPSON LOW, ETC., 1875). Includes a short account of a visit to Singapore, the prototype of many by travellers of this period.
- Robertson, E. J. *Straits Memories*. (SINGAPORE, M.P.H., 1910). A short volume of reminiscences, mostly referring to the sixties and seventies.
- Vaughan, J. D. *The Manner and Customs of the Chinese of the Straits Settlements*. (SINGAPORE, MISSION PRESS, 1879).

Twentieth Century Accounts

- Angier, A. G. *The Far East Revisited*. (LONDON, WITHERBY, 1908). A fairly good short account of Singapore, (circa) 1905.
- Cook, Rev. J. A. Bethune. *Sunny Singapore*. (LONDON, E. STOCK, 1907).
- Braddell, Sir Roland. *The Lights of Singapore*. (LONDON, METHUEN, 1934). A most readable book about Singapore and Malaya by a member of a family which has lived in the Colony for three generations.

- German, R. L. (Comp.). *Handbook to British Malaya*. (LONDON, MALAY STATES INFORMATION AGENCY, 1935). A concise account of the physical features, history, administration and economics of the country in the thirties: could be improved, but has not even been repeated.
- Hawkins, G. and Gibson-Hill, C. A. *Malaya*. (SINGAPORE, GOVERNMENT PRINTER, 1952). A short, but very readable, summary of Singapore and the Federation of Malaya in 1952, fully illustrated with over 120 photographs.
- McKie, R. C. H. *This was Singapore*. (LONDON, ROBERT HALE, 1951). A racy account, in the post-war vein, open to criticism but not without documentary value.
- Purcell, V. *Malaya: Outline of a Colony*. (LONDON, THOMAS NELSON & SONS, 1946). A short description of Malaya for general reading ending with an account of the impact of war on the country.
- Secretary for Economic Affairs and Public Relations Secretary, Singapore. *Malaya, a Guide for Businessmen and Visitors* (SINGAPORE, S.E.A., 1951).
- Willis, A. C. (Comp.). *Guide to Singapore and Malaya*. (SINGAPORE, ADVERTISING & PUBLICITY BUREAU, 1940). A tourists' guide-book of pre-war Singapore, illustrated.
- Winstedt, Sir Richard. *Malaya: the Straits Settlements, the Federated and Unfederated Malay States*. (LONDON, CONSTABLE, 1923). A good short description of Singapore and Malaya, with chapters on physical features, peoples, history, fauna, flora, administration and economic products. Now out-of-date on many points, but worth revision and republication, with more recent illustrations.
- Wright, A., and Cartwright, H. A. (Editors). *Twentieth Century Impressions of British Malaya*. Noted above, but worthy of consideration again under the present heading.

DEPENDANCIES

Christmas Island

- Andrews, C. W. *A Monograph of Christmas Island (Indian Ocean)*. (LONDON, BRITISH MUSEUM (N.H.), 1900). Based on collections made during a year's stay on the island, 1897-98 (See text on Christmas Island, *antea*).
- Gibson-Hill, C. A. *The Early History of Christmas Island, in the Indian Ocean*. (SINGAPORE, JMBRAS, 22, (1), 1949: 67-93). Includes a full bibliography of the earlier publications on the island.
- Various Authors. Papers relating to the Fauna of Christmas Island, in the Indian Ocean. (SINGAPORE, BULLETIN OF THE RAFFLES MUSEUM, No. 18, 1947). Based on collections made on the island in 1938-40, with reference to earlier work.

Cocos-Keeling Islands

Gibson-Hill, C. A. *Notes on the Cocos-Keeling Islands*. (SINGAPORE, JMBRAS, 20, (2), 1947: 140-202). Gives an account of the history of the islands and a description of the form and organization of the settlement on the main atoll in 1941. Continued in *The Island of North Keeling*, by the same author, JMBRAS, 21, (1), 1948: 68-103.

Gibson-Hill, C. A. *Documents relating to John Clunies Ross, Alexander Hare and the establishment of the Settlement on the Cocos-Keeling Islands*. (SINGAPORE, JMBRAS, 25, (4), 1953 for December 1952). Includes a long biographical introduction and full notes.

Wood-Jones, F. *Coral and Atolls*. (LONDON, REEVE & CO., 1910.) Partly based on a stay on the islands in 1905-06.

Various Authors. *Papers on the Fauna of the Cocos-Keeling Islands*. (SINGAPORE, BULLETIN OF THE RAFFLES MUSEUM, No. 22, 1950). Based on collections made during a residence (by Gibson-Hill) of ten months in the group in 1941.

JOURNALS

The following scientific and cultural journals published in Singapore or the Federation of Malaya contain papers of local interest and value on the subjects that they cover. The titles are those used at the present time: where there has been a change, the earlier titles are shown under the present one.

Bulletin of the Raffles Museum. (DIRECTOR, RAFFLES MUSEUM, SINGAPORE). Devoted to zoological papers, largely taxonomic, but (especially in recent issues) some on ecological subjects, or summarizing field studies. No. 1 (1928), continuing (1-2 numbers annually).

Bulletin of the Raffles Museum, Series B. (DIRECTOR, RAFFLES MUSEUM, SINGAPORE) Devoted to papers on local anthropology and archaeology. No. 1, 1936, continuing (only four issued, 1936, 1937, 1937 and 1949).

Gardens' Bulletin, Singapore. (DIRECTOR, BOTANIC GARDENS, SINGAPORE). Vol. 1, pts. 1-5, (Jan.-May 1912), titled *Agricultural Bulletin of the Straits and Federated Malay States*. 3rd Series: title then changed to *Gardens' Bulletin, Straits Settlements*: present title adopted from Vol. 11, (4), September 1947. Devoted to botanical papers, largely taxonomic, but with some on economic and horticultural subjects. Vols. 1 (1912), continuing.

Journal of the Federated Malay States Museums (DIRECTOR OF MUSEUMS, F.M.S., (KUALA LUMPUR)). Devoted to papers on local zoology, anthropology and archaeology. Vols. 1 (1905-06) to 19, pt. 1 (1936). Vol. 18 (1936-41): publication not resumed after the war.

Journal of the Indian Archipelago and Eastern Asia. (FOUNDED, EDITED AND PUBLISHED BY J. R. LOGAN, (SINGAPORE)). Contains a number of valuable papers, mostly devoted to local anthropology and history. Vols. 1 (1847) to 9 (1855): New Series, Vols. 1 (1856) to 3, pt. 1 (1859) and 4, pt. 1 (1862 or 1863): no others issued.

Journal Malayan Branch of the Royal Asiatic Society. Council of the MBRAS, with an appointed editor: published from the Raffles Museum, Singapore. Succeeds the *Journal of the Straits Branch, R.A.S.*, Nos. 1-86 (1878-1922). Devoted to papers on local history, anthropology and archaeology, with some on botany and zoology, especially in the earlier numbers. Vol. 1 (1923), continuing (publishes an annual volume of 2-4 parts).

Malayan Agricultural Journal. (DIRECTOR, DEPARTMENT OF AGRICULTURE, KUALA LUMPUR). Succeeds *The Agricultural Bulletin of the Straits and Federated Malay States*, founded and edited by H. N. Ridley, Vols. 1-10 (1891-1911), published in Singapore. Vols. 1-9 of the present series titled *Agricultural Bulletin of the Federated Malay States*. Devoted to papers on or related to local agriculture and its problems. Vol. 1 (1912-13), continuing.

Malayan Forester. (DIRECTOR, DEPARTMENT OF FORESTRY, KUALA LUMPUR). Devoted to papers on or related to local forestry problems. Vol. 1 (1930), continuing.

Malayan Nature Journal. (MALAYAN NATURE SOCIETY, WITH APPOINTED EDITOR (KUALA LUMPUR)). Devoted to semi-popular papers on local zoology and botany. Vol. 1 (1940-41), continuing (published quarterly four parts making one volume).

Medical Journal of Malaya (MALAYAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION, WITH APPOINTED PANEL OF EDITORS (SINGAPORE)). Succeeds *The Journal of the Straits Medical Association* (1890-1903); changed to *The Journal of the Malaya Branch of the British Medical Association* (1904-1910); *The Malaya Medical Journal* (1926-1940). Devoted to papers on local medical problems and records of cases. Vol. 1 (1946), continuing (publishes four parts to a year, making one volume).

The Singapore Naturalist. (SINGAPORE NATURE SOCIETY, WITH APPOINTED EDITOR (SINGAPORE)). Devoted to semi-popular papers on local zoology and botany. Vol. 1, pts. 1 (1922) to 5 (1925); Vol. 2, pt. 1 (1928), entitled *The Malayan Naturalist*, no other parts issued.

JOHORE GRID

Projection Cassini
Spheroid Everest
Origin Blumut $2^{\circ} 2' 33.30''$ N
 $103^{\circ} 33' 45.93''$ E

False Co-ordinates of Origin
450,000 Yards E. 300,000 Yards N.

GRID & TRUE NORTH



Mean Grid North in this sheet
Coincides with True North

Magnetic Declination about
 $1/2^{\circ}$ E. in 1950.
(Annual change negligible)

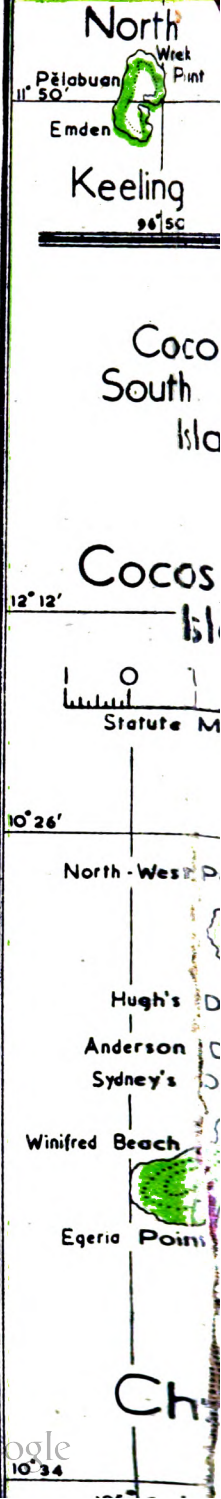
Grid references are given in hundreds of yards
East and North of the South-west corners of
the lettered squares: thus the grid reference of
 Δ MT. SERAPONG is P 832042
(for grid letters see body of map)

325.342
C 787151

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3 6105 013 797 316

on Island (P Tikus)

cos or
h Keeling
Island

Turk's Head Reef

1 to 6 fathoms
with sand & coral bottom

Bera
P. Gangsa

Home Island (P Selma)

P Ampang

P. Kumpang

P. Chéplok

P Pandan

P. Siput

P Labu

Coral studded with
deep pools

Sand and Coral Mud

West Island (P Panjang)

Landing
Strip

South Island
(P Atas)

os - Keeling
Islands

2 3

98° 49'

98° 56'

Miles

Point

Rocky Point

North-East
Point

Flying Fish Cove
Smith Point

300
600
900
Old Quarry
Phosphate Hill

West White
Beach

Rhoda
Beaches

Margaret
Beaches

Ethel Beach

Low Point
Steep Point

Gladys Beach

Broome's Point

Greta Beach

Dolly Beach

Middle Point

Smithson
Bight

Ross Hill 1060

South Point Quarry

Christmas Island

South Point

105° 46'

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